

CENSUS OF INDIA, 1921

VOLUME I

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INDIA

PART I.—REPORT

BY

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CALCUTTA
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TABLE OF CONTENTS.

CHAPTER I—Distribution and Movement of the Population.

Scope of the Report—Political Divisions—Natural Divisions—Area and Population of the whole Empire—Distribution of the Population—Movement of the Population—Migration—The War—Economic conditions of the decade—Public Health—The Influenza epidemic of 1918-19—Vital Statistics—The progress of Population in the intercensal period—Comparison between enumerated and deduced Population—Distribution and variation by Provinces and States—Definition of house—Variations in size of households—Growth of Population—Standard of Living	1
SUBSIDIARY TABLES	57

CHAPTER II—Urban and Rural Population

Introductory remarks—Definition of Town—General distribution of urban population in Provinces and States—Urban Population and religion—Sex proportions in urban areas—Cities—Pressure of population on space—Distribution of Rural Population	63
SUBSIDIARY TABLES	80

CHAPTER III—Birthplace

Introductory remarks—Main Statistics—Types of Migration—Balance of Migration—Migration within India—North-West Frontier Nomadism—Migration between India and other countries	82
SUBSIDIARY TABLES	100

CHAPTER IV—Religion

Introductory remarks—Religion as a basis of statistical classification—General Religious distribution—Tribal Religions—Meaning of the term—Tribal Religions—Statistics—Religious movements in the tribes—Hindus—Jains—Sikhs—Buddhists—Muhammadans—Christians—Zoroastrians—Religious Sects of Hindus and Muhammadans—Arya Samaj—Brahmos—Sunnis and Shias—Christian sects	108
SUBSIDIARY TABLES	122

CHAPTER V—Age

General Observations—Concentration on certain numbers—Actuarial examination of the Statistics—Variations in the age distribution—Influence of the past—Vital Statistics—Proportion of children to adults—Infant Mortality—Age distribution by religion and caste—Mean Age—Sundburg's Age-categories	126
SUBSIDIARY TABLES	135

CHAPTER VI—Sex

Introductory remarks—Main Statistics—Migration—Sex proportions at birth—Sex ratio by different ages—Sex ratio at death—Sex proportions in different regions—Sex by Religion and Race—Summary of conclusions	140
SUBSIDIARY TABLES	149

CHAPTER VII—Civil Condition

The return of Civil Condition—General Conditions of Marriage—Restrictions on marriage—Main statistics—Civil condition by religion—Civil condition by Provinces—Comparison with previous censuses—Early marriage—Legislation affecting marriage—The widowed—Re-marriage of widows—Marriage and longevity—The proportion of effective marriages and the average age of mothers—Summary	151
SUBSIDIARY TABLES	164

CHAPTER VIII.—Literacy

	PAGE
The scope of the return—Reference to Statistics—Extent of literacy—Progress of literacy—Literacy among females—Literacy by Religion—Literacy by Caste—Literacy in English—Literacy in Cities—Acquisition and Retention of literacy—Comparison with age-groups of previous census—Comparison with the returns of Education Department	15
SUBSIDIARY TABLES	186

CHAPTER IX.—Language

Introductory remarks—The nature of the return—Main features of the return—Austro Family—Tibeto-Chinese Family—Karen and Man Families—Dravidian Family—Indo-European Family—Figures of Principal Languages—Hindi, Urdu and Hindustani—Oriya—Lahnda—Languages of the Bombay Presidency—Displacement of minor languages—The standardisation of languages in India	19
SUBSIDIARY TABLES	200

CHAPTER X.—Infirmities.

Nature of the inquiry—Accuracy of the figures—Reference to Statistics—Variation since 1881—Insanity—Nature of the figures—Distribution and variation—Insanity by sex and age—Insanity by Caste—Lunatic asylums—Deaf mutism—Distribution and variation—Deaf-mutism by age and sex—Deaf mutism by Caste—Blindness—Distribution and variation—Blindness by age and sex—Blindness by Caste—Leprosy—Value of the figures—Distribution and Variation—Leprosy by age and sex—Leprosy by Caste—Common marring and infirmities	203
SUBSIDIARY TABLES	17

CHAPTER XI.—Caste, Tribe, Race and Nationality

Introductory remarks—Indian-born and Foreign-born—Divisions of Indian-born—Reasons for the return of caste—Difficulties of the return of caste—Scope of the return of caste—Depressed classes—Hill and Forest Tribes—Brahmins and non-Brahman castes—Bhadralok of Bengal—Sikhs—Muhammadans—Race in Burma—Europeans and Anglo-Indians—Modern tendencies	221
SUBSIDIARY TABLES	234

CHAPTER XII.—Occupation.

Method of the Census by Occupation—Classification Scheme—Industrial Census—Subsidiary Occupations—Workers and Dependents—Statistical results of the Occupational Census—Production of Raw Materials—Preparation and supply of Material Substances—Public Administration and Liberal Arts—Miscellaneous occupations—Statistics of the Industrial Census—Census of Handlooms—Labour—The occupations of Women—Occupation by Race and Community	236
SUBSIDIARY TABLES	279

Appendices.

APPENDIX	I—Attitude of the Public and the influence of Non-co-operation	III
"	II.—A Mathematical aspect of Migration	vii
"	III.—Present day tendencies in the religious sphere	ix
"	IV.—Account of the Terapanthi Sect of Swetambar Jains	xiii
"	V.—Buddhism in Burma	xv
"	VI.—Female Infanticide	xvii
"	VII.—The size and sex constitution of the average family and the fertility of marriage life	xix
"	VIII.—Some articles and paragraphs in the Provincial Reports dealing with special subjects	xxi

CENSUS OF INDIA, 1921

VOLUME I

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INDIA

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PART I.—REPORT

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INTRODUCTION

1 This Report embodies the results of the 5th regular census of India taken on the 18th of March, 1921. In compiling it I have, for the most part, adhered to the general arrangements of the subject matter adopted by my predecessors. It is essential to preserve some uniformity in the presentation of the statistics in order that it may be possible to measure progress and development by comparison with the past. The main tables in which the figures are presented are the result of careful thought and study in the past and I have not introduced changes except where such changes resulted in a clearer exhibition of the statistical matter without the sacrifice of continuity of method. Similarly in the review of the figures in this volume I have followed in the main the arrangement of the subject matter previously adopted. I have, however, taken a somewhat different view of the scope and design of the Report from that adopted in the past. In the preface to the Report of the Census of 1891 Sir Athelstane Baines wrote —

“A good deal has been added too, in explanation of the statistics that would have been deemed unnecessary had the work been written for efficient readers only, but which becomes advisable as soon as a public is approached that has no experience of what is to us in India a matter of every day observation.”

To this sanguine view of the appeal of the Indian Census Reports may doubtless be ascribed the tradition that they should embody such descriptions of the general conditions of the Indian continent, its geographical, geological, physical, meteorological and ethnical characteristics, as should be necessary to ensure that the analysis of the particular factors which influence the statistical results is interesting and intelligible to the uninformed reader. There must, however, be a limit to this treatment of the subject. India, it is true, develops and progresses and the individual conditions affecting its population in a definite period vary. But the elemental foundations remain. Her ancient and mysterious faiths have not removed the mountains, her rivers flow on, the monsoon blows up with greater or less intensity and the main differences of origin, habit and race persist beneath the development of political and social character which the levelling influences of progressing civilization induce. Even if I had the literary ability to present anew for the fifth time a general description of India and its peoples I should still consider that such an endeavour was unsuitable and unnecessary. The work has been done over and over again by others besides Census Commissioners. It has amused the leisure of abler writers than myself and edified a public which will know nothing of this report. I have taken it for granted, therefore, throughout the report—and this is also the attitude adopted in most of the provincial reports—that the student who is sufficiently attracted to the subject of the growth of the population of India is familiar with the previous history and the general features of the country, its provinces and states and their peoples, and where it is necessary to refer to such matters the reference will take the form of allusion rather than of description. I have also assumed in the reader such knowledge of the economic conditions of the individual provinces and tracts of the country as would be obtained by a perusal of the more elaborate descriptions in the reports of previous censuses, to which I shall where necessary refer for the more detailed discussion of past circumstances. This attitude may deprive the report of some of the interest that attached to its predecessors, but it is impossible that every successive census report should be entirely self-contained and at any rate there

is this advantage that the method described has enabled me to curtail considerably the length of the review

2. In the Resolution issued by the Government of India in June, 1920 it was observed that—

"Much interesting and valuable information on the subject of the religious belief of the peoples of India, their ethnic divisions, social structure and traditions, customs, folklore and dialects has been collected and presented in previous census reports of India and of the provinces. A good deal of this and similar information collected from various sources has now been collated and presented in a systematic manner in the publications of the ethnographic and linguistic surveys, and except where there are special reasons, e.g. in Burma, for continuing the ethnographic and linguistic researches it is unnecessary that the collection of further information on these subjects which does not bear directly on the census statistics should form a prominent feature of the present census. On the other hand the Government of India desire that special attention should be given on the present occasion to the collection of statistical and general information bearing on the industrial and economic side of the life of the people. The precise nature of these enquiries must to some extent, differ in different provinces and it is intended that the Provincial Superintendents of Census Operations should work in close co-operation with the local Departments of Industries. The Census Commissioner will indicate to Superintendents of Census Operations the general lines on which these enquiries might proceed and the exact statistical information to be obtained. The Government of India think it advisable that as in the case of the ethnographic enquiries previously undertaken, an officer in each district should be specifically nominated to undertake the collection of such local information as may with the approval of the local Government be indicated by the Provincial Superintendent of Census Operations. While realizing the difficulties attending this suggestion owing to the increase in work and the depletion of staff the Government of India trust that the practical nature of these enquiries will commend the suggestion to the consideration of local Governments wherever it is feasible."

In regard to the omission of much of the discussion which formed an interesting feature of previous census reports it will be found that the reports of the present series have conformed to the instructions given. The system adopted on the present occasion was that the letter press of the report itself should usually be confined to a presentation of the statistics collected on the schedule and exhibited in the tables, with such a review of them as should suffice to bring out their true meaning and place them in relation to the factors that have influenced or determined them. Problems of population taken in its various aspects, enter into almost every circumstance of the life of a people and the track of the figures leads us into country of the widest interest where there is plenty of scope for the explorer even though he keeps fairly close to the main track and resists the lure of the sidepaths into the attractive but sometimes obscure and ill-lit valleys that fringe the route. At the same time it was important that no new matter that could be used to throw light on the statistics should be lost, while in many cases it was advisable to go further into the origin or nature of the special factors which bear on the figures. The more curious reader will find in the appendices to many of the volumes more elaborate discussions of matters kindred to the main subject which are the result of a deeper or wider research.

With regard to the collection of industrial and economic statistics and information the conditions altered considerably during the course of the census operations. Proposals were made for something of the nature of an extensive economic survey in parts of India but it was found impracticable to undertake anything of the kind under the conditions obtaining at the time and with the staff available. The rapid development of the Industrial Departments of the Government of India and of the provinces and states resulted in the concentration of effort and action

in regard to industries in the hands of the officers of these departments and of the Labour Bureaus who had special knowledge and facilities for collecting and dealing with industrial information of all kinds and anything that the census department could achieve in this direction was of little value besides the more systematic and experienced work of experts and specialists. At the same time a considerable amount of interesting information has been collected in the provincial reports along lines which I laid down from head-quarters but the extent to which attention was diverted to general matters from the census statistics themselves differs considerably in the case of different provinces and consequently the information obtained is of a somewhat scattered nature which does not always lend itself to compilation and reproduction in a report dealing with the whole of India. In Bombay for example, under the orders of his Government Mr Sedgwick abstained entirely from any general discussion of industrial methods and results. In the United Provinces whatever information of this kind was collected was handed over by Mr Edye to the head of the local industrial department to be worked up in that department and, speaking generally, the efforts of the Census Superintendents, where they have been directed outside the immediate scope of the population census have been to obtain and present statistics which can be dealt with hereafter by trained experts. The statistics obtained through the special industrial schedule which is described in Chapter XII should prove interesting and useful to those engaged in studying industrial development in India.

3 The fifth census of the Indian Empire was taken on the night of the 18th of March 1921. The chief considerations which decide the selecting of the date of the census are (1) that the date should be as nearly the exact decennial anniversary of the previous census as possible (2) that there should be moonlight between 7 P.M. and midnight when the enumerators make their verification of the schedules and (3) that occasions of large fairs or other gatherings which would disturb the normal distribution of the population should be avoided. On the present occasion the date selected conformed with these various requirements. The Census of 1911 had been held on March 10th of that year so that the decennial interval was only exceeded by eight days. The moon was just after the full and the season was in most parts of India neither too cold nor too hot for the enumerators to make their rounds with reasonable comfort. It is impossible altogether to avoid festivals, fairs and similar assemblies in so wide an area as the Indian Empire, but except for the *Urs* fair in Ajmer, a concourse of pilgrims in Puri, some fairly large fairs in South India and various small gatherings in different parts of the country there was no large disturbing element of this kind. Plague, which had in 1911 caused a serious dislocation of the population in many towns of the Bombay Presidency the Punjab, the Central Provinces and elsewhere was luckily nowhere virulent at the time of the 1921 Census, and the distribution of the people was on the whole as normal as it would be possible to find it at any time in any average year.

4 In the introduction to his Census Report for India of 1911 my predecessor, Sir Edward Gait, gave a brief description of the manner in which the Indian census is taken. There has been little change in the main organization and machinery of the enumeration. In each province and large state the census is controlled by a special officer who frames his local orders on the basis of the general instructions contained in the Census Code which is issued from the office of the Census Commissioner and of the various circulars which reinforce and amplify the instructions in the Code. The district, which forms the main unit of census

administration, is divided out into charges, circles and blocks the block, consisting usually of thirty to forty houses, being the ultimate sphere of the enumerator. The charge and circle officers are, wherever possible, local officials who are called upon to perform duties as census officers in addition to their ordinary official work. The Land Record staff and the village schoolmasters perhaps supply the most efficient portion of the subordinate census staff. Enumerators have to be sought after among the most intelligent and literate portion of the population, and are placed under a statutory obligation to perform their duties as census officers. The staff is carefully instructed some months before the census, and a preliminary enumeration is held during the month or three weeks before the census date in which all the schedules are written out for the population then found in the blocks, so that the actual census is merely a revision, with reference to the facts on the census night of these schedules already carefully prepared and checked. The immobile nature of the Indian population secures under this system a very high standard of accuracy in the enumeration of the ordinary population. For population located under abnormal conditions, e.g. in transit by rail, road or water or collected in places such as cantonments, hospitals, asylums, jails and so forth or temporarily in fairs or camps and for population so dispersed over large tracts of the country as to render impossible enumeration under the ordinary organisation special measures were adopted which were based on the result of previous experience and need not be described here.

5. Once obtained it is important that the figures should be despatched from the local areas to the districts and provincial centres as early as possible, so that there can be no opportunity for tampering with them and there was as usual keen competition among the Provinces and States to get their provisional totals, based on a summary count of the schedules, into the Census Commissioner's office with the greatest possible speed. The first figures to arrive were those of the Sarangarh State in the Central Provinces, with a population of 118 thousand, and within four days the returns of a population amounting to 123 millions had been received. The publication of the total of India was delayed by the non-receipt of certain totals from the Andaman Islands, which were held back by a temporary break-down of communications, but the provisional figures for all India were published on the 5th of April. The difference between this provisional total and the total obtained after elaborate compilation of the returns in the offices only amounted to 04 per cent. of the whole population of India.

6. The compilation and tabulation of the statistics was carried out under much the same system as was adopted in 1911 and described in the introductory section of Sir Edward Gait's report. The entries in the schedules are transferred by copyists on to slips of a convenient size and shape and these slips are made up into bundles and manipulated by sorters into the various combinations required for the different tables. The possibility of superseding the slip system by the introduction of mechanical sorting by means of electric sorters or tabulators was naturally considered. The general objections to the use of machinery in the Indian census were stated by Sir Edward Gait in his report. The main difficulty perhaps lies in the fact that such machines had not previously been introduced into India or tested by any experience under Indian conditions. It is impossible to make experiments on a large scale on the occasion of the periodic census when work has necessarily to be rushed through and false steps cannot be retraced and it was necessary that such machines should survive a full trial in a permanent office before they were adopted for census purposes. Now that this sorting

machinery has been introduced into some of the large Railway Offices in India it will be possible, before the Census of 1931, to decide on the basis of actual experience under local conditions whether it is possible to substitute for our present system of compilation the more rapid, accurate and impersonal method of mechanical sorting

7 There is no direct means of gauging the accuracy of the Indian census, but there are certain considerations which can help us to arrive at some idea of the probable extent to which the figures represent a complete enumeration of the population. In the first place, as will be seen in Chapter III, no less than 90 per cent of the population were enumerated within the district in which they were born. All but a few of these were probably enumerated in their place of residence and this settled and immobile characteristic of the people is itself an important ally on the side of accuracy of enumeration, as it means that the schedules prepared and checked at leisure during the preliminary enumeration by census officers with local knowledge of the people, are very little altered at the final count. Again, the elements in the population in which inaccuracy is most likely are (1) the town areas, especially the large congested towns and cities, (2) the remote and sparsely populated areas in which the standard organization cannot be easily applied and (3) temporary collections of people in camps and fairs away from their ordinary place of residence and the floating population on rail, road and water.

(1) The town population of India is 32½ million persons, but of these 8½ million persons reside in towns of under 10,000 persons which are not large enough to present any difficulty of organization. The remaining town population, viz., 24 million persons represents only 7 per cent of the total population of India.

(2) The population of areas in which, owing to inaccessibility or administrative difficulties, the standard organization could not be put in force amounts to rather more than 6½ million persons, excluding the Presidencies of Bombay and Madras the figures for which are not available. Even if the total amounts to 8 million persons this only represents 2.5 per cent of the total population of India. Arrangements differed in these areas but, except in a few tracts where only an estimate of the population could be made, it was usually possible to draw up a fairly complete scheme for the census of the inhabitants, and, as by their very nature the population of such areas was specially immobile and stationary and measures were always devised to preclude a double count of those who moved in or out of the areas, the census was usually as accurate here as elsewhere, the only difference being that the final verification on the census night was omitted.

(3) The date of the census is, as we have seen, chosen so as to ensure a minimum disturbance of the normal distribution on account of fairs and gatherings. On the present occasion there was little serious dislocation on account of plague or other epidemics. In any case the population contained in camps and gatherings as well as the number of persons actually in transit from place to place is an insignificant fraction of the total. Specially careful arrangements are made for these classes and there is no reason to think that omissions are numerous. Apart from these special types, amounting in all to not more than 2 per cent of the population, we may confidently assert that the standard of accuracy in the enumeration is exceptionally high in India. Over the large part of the country the organization ultimately rests largely on the Land Record staff, an exceedingly trustworthy and capable body of local officials who have an intimate knowledge of the people within their sphere of work. Plenty of time is given

for the various steps in the organization which is now familiar to the people and accepted by them usually without resentment and often with considerable interest

8 On the present occasion there were in some places special difficulties on account of the non-co-operation movement. The obstacles in this case took the form not so much of direct opposition as of a distinct disinclination on the part of that section of the population on whom the census relies, the lower literate classes of the towns and larger villages, to take up without remuneration work which demanded a certain amount of time and entailed a certain amount of trouble and inconvenience. Our more definite obstacles in the form of strikes and direct refusal to co-operate occurred chiefly in the west of India (the Bombay Presidency) in Calcutta and in some of the cities, towns and larger villages of the Punjab the United Provinces and the Central Provinces. At a critical time a large section of the village accountants of the Bombay Presidency who constitute a very important element in the census organization, went on strike for higher pay and refused to take on duties in connexion with the enumeration. Similar strikes on the part of the Land Record staff occurred in other provinces, while the school masters of village schools, another body of men ordinarily available for the enumeration were in a state of extreme dissatisfaction at their pay and prospects. In many of the larger towns the greatest difficulty was experienced in obtaining a sufficient staff of enumerators and supervisors. The Indian press, while advising that information should not be withheld by the general public for filling up the census schedules declared that all voluntary assistance in the way of acting as enumerators should be refused and, though Mr Gandhi announced at the last moment that no obstacle should be placed in the way of the census operations it was too late for this pronouncement to have much effect and throughout the Bombay Presidency and elsewhere the spirit of the non-co-operation movement afforded those designated for census work just that excuse which they required for shirking a duty which they had from the first been anxious to avoid. Difficulties of this kind had to be dealt with by a district staff already fully occupied with extra work in connexion with the elections to the legislative assemblies and with the many new political economic and local problems which the state of the country presented. The manner in which these difficulties were met and successfully met is described in the provincial reports. Recourse was had where necessary to the penal provisions of the Census Act and official assistance was called up wherever it was available. The number of paid enumerators was increased and in certain areas blocks were doubled up while in some cases we dispensed with the final check on the census night and relied on the preliminary enumeration. The Provincial Superintendents are satisfied that in the end the principal difficulties were successfully overcome and we have, I believe obtained a census which is not less accurate than previous enumerations in respect of the number of persons included, and throughout the Indian States and over a very large rural area of British India which is little affected by the advanced trend of opinion the schedules are at least as accurate as they were in the previous census. But it must be admitted that in the not inconsiderable areas in which the difficulties of obtaining and training the staff were pronounced a certain proportion of the schedules were carelessly and inaccurately written up. In some cases it has been possible to revise defective schedules after the census but this has not been feasible in all cases. To express the degree of accuracy of the figures by a mathematical measure is however entirely a matter of guesswork. Mr Lloyd (Assam) speaks of an exceptionally accurate census. Mr Thompson (Bengal) opines that it is very unlikely that the census total is out by as much as one per mille and it is pro-

bable that it is very much more accurate Mr Jacob (Punjab) discusses the question of accuracy in some detail and takes a less sanguine view He thinks that so far as the enumeration by sex and religion is concerned it would be unsafe to assume greater accuracy than one per cent of error and that in some of the columns the error is almost certainly greater than this I am inclined to think that this is an outside estimate of the probable extent of error In any case in a large number of cases errors of omission must be counterbalanced by double enumeration, so that so far as numbers are concerned there is a corresponding reduction of the total deficiency

9 I may perhaps add some brief information as to the cost of the census in India The bulk of the cost which in the case of so large a population is naturally of considerable importance, falls on the Imperial Exchequer, though some of the local charges are met in part by the Municipalities and other local bodies The cost in 1911 in British India worked out to between Rs 5 and 6 per 1,000 of the population, which was somewhat less than in 1901 In the last decade every item connected with the census has substantially increased in price, including the wages of establishment and the cost of paper and printing The cost on the present occasion amounts to Rs 14 per 1,000 but varies considerably in different provinces, being over Rs 27 in Burma and between Rs 9 and 11 in Bengal and Bihar and Orissa The expenditure compares well with that in some of the States, *e.g.*, Baroda over Rs 54 and Cochin Rs 23 per 1,000 The cost of the census of England and Wales in 1911 is recorded as working out to £5-8s-8d, which is equivalent to between 81 and 82 rupees of Indian money

10 This Report forms one volume of the Census series, the remaining

Province or State	Name of the Census Superintendent.
Andamans and Nicobars	R F Lewis Esq
Assam	G T Lloyd Esq ICS
Baluchistan	R B Dewan Jamiat Rai C.I.E.
Bengal	Major T C Fowle I.A.
Bihar and Orissa	W H. Thompson Esq ICS
Bombay	P C Tallents Esq ICS
Aden	L J Sedgwick Esq. ICS
Burma	E M. Duggan Esq
C. P. and Berar	S G Grantham Esq ICS
Coorg	N J Roughton Esq ICS
Madras	K. N. Subbaya, Esq
	G T Boag Esq ICS
N W F Province	Major R. J. Macnabb
Punjab and Delhi	R B Sardar Lehna Singh
United Provinces	L Middleton Esq. ICS
Baroda State	S M Jacob, Esq ICS
	E H Edye Esq ICS
	S V Mukerjee Esq
Central India Agency	Lt Col C E. Luard M.A., I.A.
	A C Lothian Esq. ICS
	Major E. J. D. Colvin, I.A.
	H. V. Biscoe I.A.
Cochin State	P Govinda Menon Esq
Gwalior State	Prof. Janki Nath Datta
Hyderabad State	Mohd. Rahmatullah, Esq
Kashmir State	K. B. Chowdari Khushi Mohammed.
Mysore State	V R. Thyagarajaiyar Esq M.A.
Rajputana and Ajmer	R. B. Pandit Brij Jiwan Lal B.A., I.S O
Travancore State	S Krishnamurthi Ayyar Esq

24 volumes dealing each with the census of an individual Province or State The names of the officers who controlled the census operations in the main provinces and states are given in the margin and I acknowledge with gratitude the ability, energy and devotion which they have shown in the performance of their duties, without which it would have been impossible to have brought to a successful issue by far the largest and most difficult census in the world The reports will be found well up to the

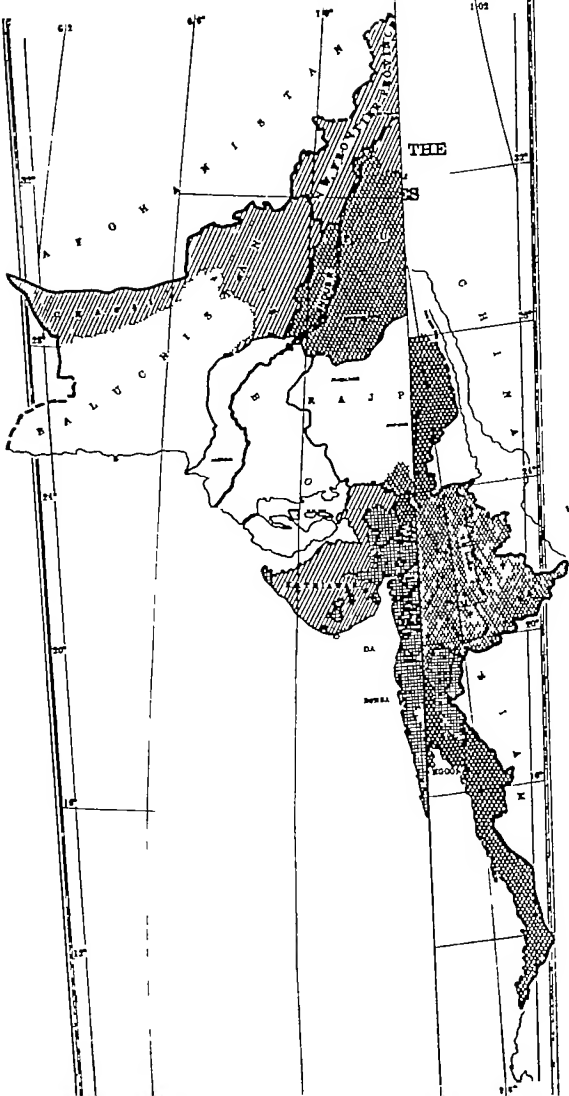
very high average of the census reports of the past and some of them are of exceptional interest

Messrs Thompson, Tallents and Lloyd have written exceedingly interesting reports for the three Eastern Provinces of India, in which the effects of the economic and industrial conditions on the population statistics are well brought out Mr Sedgwick successfully overcame special difficulties of organization in the Bombay Presidency, owing to strikes of census officials, and his report, which reached me as early as September, 1922, contains a great deal of interesting statistical discussion illuminated by well designed and well executed diagrams In the Punjab Mr Middleton carried through the enumeration and compilation successfully but owing to illness was only able to write one chapter of the report, an interesting

chapter in which he has given a good sketch of the movements of population and the economic conditions of the Province. Mr Jacob who succeeded him and finished the report, was able in spite of the short time at his disposal to contribute some valuable statistical discussion on lines which are new in Indian Census literature. In his report of the United Provinces Census Mr Edye, while marshalling his facts and figures with considerable skill, has imported a strain of humour and epigram which makes the volume thoroughly good reading. Messrs. Boag and Roughton have written sound reports of the conditions in Madras and the Central Provinces and the material in the North West Province and Rajputana has been ably worked up by Rai Bahadur Sardar Lehna Singh and Rai Bahadur Pandit Brij Jiwan Lal. There were disconcerting changes in the Superintendents in the course of the census in Central India and Baluchistan but Col. Leard's great knowledge of the country and experience of previous enumerations were invaluable for the organization of the Central India census and Major Fowle's report on the Baluchistan census is an excellent contribution to the descriptive history of an interesting tract. Mr Grantham had for various reasons special difficulties to contend with in Burma, which were enhanced by his own continual ill health. He brought a keenly critical mind to the examination of the statistics and his report contains passages of considerable originality. The reports of the various States are of considerable interest, that of the Baroda State by Mr Mukerjee being specially well written and containing a great deal of valuable statistical and general discussion. Most of the reports contain appendices in which it has been possible to carry discussion of interesting matter into detail which it would have been inconvenient to include in the text, and a list of some of the more interesting passages of this kind, both in the text and the appendices will be found in Appendix VIII to this Report. It is unfortunate that owing to unavoidable circumstances it has not been possible to include in this volume the report of Mr H. G. W. Meikle, Government Actuary on the age statistics of the census. This report will be published separately and should be found specially interesting as the material has on this occasion, been worked up by an actuary who is thoroughly in touch with Indian conditions.

11 The volume of work dealt with by the Government Presses has enormously increased during the last ten years and delay in the completion of this as well as some of the provincial reports is due to the fact that it is not possible to obtain in the presses the same expedition in the outturn of work as it was in the past. I am grateful to Mr J. J. Meikle, Superintendent of Government Printing, for the assistance he has given by undertaking the printing not only of this report but of some of those of the Provinces and States. Most of the diagrams in this Report have been reproduced at the Thomason College, Roorkee, and the work has been done with accuracy and precision. It was, owing to the necessity of economy unfortunately not possible to carry through the execution of a somewhat elaborate map of India showing by colour the distribution of the population which I had designed in consultation with Colonel Tandy R.E., of the Government of India Survey Department, and a much more modest map has had to take its place.

Finally I must acknowledge the invaluable services of my Superintendent Pandit Gopal Datta Tewari, B.A. who has controlled my office throughout my tenure of the appointment of Census Commissioner. Besides the examination and check of the detailed statistical matter and the compilation of the tables a considerable amount of general responsibility has fallen on him during my absence on tour and I am also indebted to him for valuable assistance in connection with this report.



REPORT

ON THE

CENSUS OF INDIA, 1921.

CHAPTER I.

Distribution and Movement of Population.

Section I—Introductory Remarks

The statistics dealt with in this Report cover the whole of the territory known as the Indian Empire, lying roughly between longitudes 61° to 101° E and latitudes 8° to 37° N, and embracing (a) the territories directly controlled by the Government of India, generally known as British India, and (b) the Indian States, consisting of areas administered by Indian Chiefs in political relations with the central Government or with one or other of the provincial Governments. Surrounded on the northern and eastern borders by the independent countries of Persia, Afghanistan, Tibet, Nepal, Bhutan, China and Siam, the frontiers of the Empire are, except in the case of part of the eastern borders of Assam and Burma, well defined. In the mountainous country on the eastern confines of these two provinces there lie sparsely inhabited areas which have not yet been brought under regular administrative control, and in only parts of these could any enumeration of the population be undertaken or any estimate made. On the western and southern sides of India the coast line naturally affords a well defined border. Of the adjacent islands Ceylon, though a British colony, lies outside the Indian Empire, but the small clusters of the Ammudivi and Laccadive Islands on the west and the larger groups of the Andamans and Nicobars in the Bay of Bengal form part of India, while the Aden Settlement, which is under the administrative control of the Bombay Government, forms politically, if not geographically, a part of the Indian Empire and was included in the scope of the Indian Census. Within the boundaries thus described, but outside the Indian Empire, lie also the French and Portuguese Settlements, consisting of the colonies of Pondicherry, Karikal, Chandernagore, Mahe and Yanaon (French) and of Goa, Daman and Diu (Portuguese).

A census of these territories was taken by their own Governments on the 18th March, 1921, in the French Settlements and in 1920 in the Portuguese Settlements, and the results of these censuses together with estimates of the area and population of some of the independent neighbouring states which are politically most nearly connected with the Indian Empire are exhibited in the marginal statement.

State or Settlement.	Area in Square miles	Population
Afghanistan	245,000	6,380,500
Nepal	54,000	5,600,000
Bhutan	20,000	250,000
French Possessions	196	269,579
Portuguese Possessions	1,638	*

2 The main political divisions of the Indian Empire are defined in the map which forms a frontispiece to this volume. Including the Chief Commissionerships of Delhi, Coorg, Ajmer-Merwara and the Andamans, the Indian Empire has fifteen British Provinces. The last rearrangement of the eastern Provinces of India came into force on the 1st April, 1912, but statistics of the Provinces of Assam, Bengal and Bihar and Orissa were separately shown in the reports of the Census of 1911. The Province of Delhi was constituted from the 1st October, 1912. In the main tables the statistics of Delhi are separately shown, but in some of the less important tables they have been included with those of the Punjab, and the report of the latter province contains a review

* The figures were not available when this report went to press. The population in 1911 was 602,564.

of the census of Delhi. The numerous Indian States may be divided into the following groups —

- (i) Single states having separate political relations with the Government of India
- (ii) States grouped into agencies in political relations with the Government of India and
- (iii) States having political relations with local Governments.

Among the states which form separate political units is now included the Gwalior State, which was separated from the Central India Agency with effect from the 15th March 1921. The Punjab State Agency was constituted with effect from the 1st November 1921 and includes a number of the larger states which were formerly attached to the Punjab Province. The statistics of these states are separately exhibited in the Punjab Report volumes but the Agency has not been treated as a separate unit in this report. The third main group of states includes the important South Indian States of Cochin and Travancore which are politically attached to the Madras Presidency. The statistics of these states are separately shown in some of the more important tables. The territory of the Maharaja of Benares was declared an independent State on the 1st April, 1911 and the statistics are separately shown in the United Provinces volume. The combined statistics of the states attached to each province form independent units for the purposes of some of the more general tables of this report but are otherwise included with the figures of the provinces to which they are severally attached. The general effect of this arrangement may be seen in Imperial Table I and in Subsidary Table III on page 58 of this volume which gives the units adopted for the presentation of the statistics of this report. The main administrative unit in the British Provinces is the district which varies in size and population. The Thar and Parkar district of Sind has an area of nearly 14 000 square miles and two districts of the Central Provinces (Rampur and Chanda) are between nine and ten thousand square miles in size. All these districts are sparsely inhabited. On the other hand the Mymensingh district of Bengal with an area of just over 6 000 square miles, has a population of nearly five million persons, while the Gorakhpur district of the United Provinces and the Malabar district of Madras each have over three million persons. The average district population in Bengal Bihar and Orissa and Madras is over one and a half million while in the North West Frontier Province and Burma it is less than half a million.

Natural Divisions.

3 For the discussion of statistics of density and movement of population the administrative divisions of the country which have been formed on historical and political considerations, are not always a suitable basis of classification, and various schemes of natural divisions, based usually on meteorological and geological features, have been used in previous census reports for the presentation of the statistics. In the report of 1911 Sir Edward Gait adopted a scheme of sixteen Natural Divisions based on the distribution of rainfall which forms an important influence in determining the varying density of the population. The more general and constant factors which decide the topographical grouping of the population in India have now been fully discussed in the reports of 1901 and 1911 and it is unnecessary to go into the subject in great detail in the present report, while the movement of the population during the decade under consideration is largely the result of an influence which is not closely related to the principles on which the natural divisions have hitherto been based. I have therefore decided that it is unnecessary to present the statistics of India as a whole in any scheme of natural divisions, but I shall make use from time to time of such grouping of the figures as may appear most suitable for the elucidation of any particular point that may be discussed. In the case of the individual units of territory however where the discussion of the figures can be of a more detailed nature, the matter is somewhat different and in most of the reports of the Provinces and States the use of natural divisions has been continued, the principles on which they have been determined being fully explained in the provincial reports. Where it is necessary in this report to carry the discussion beyond the figures of the provinces as a whole the provincial natural divisions will sometimes be used for presenting the statistics.

Section II—Distribution and Movement of the population of the Empire

4 Details of the area and population of India and the Provinces and States are given in Imperial Table I. The main statistics for the whole of India are given in the table below. Further details of the area and population of the Provinces and States will be found in tables at the end of this chapter. The diagram opposite shows graphically the statistics of population for the whole

	India	British Provinces	Indian States		India.	British Provinces	Indian States
1	2	3	4	1	2	3	4
Area in Square Miles	1 805 332	1 094 300	711 032	Total Population	318 942,480	247 003 293	71 939 187
Number of towns and villages	687 981	500 088	187 893	(a) In Towns	32,475,276	25 044 368	7 430 908
(a) Towns	2 316	1 561	755	(b) In Villages	286 467,204	221 958 925	64 508 279
(b) Villages	685 665	498 527	187 138	Males	163 995 554	126 872,110	37 123 438
Number of Occupied Houses	65 108 389	50 441 036	14 750 753	(a) In Towns	17 845,248	13 971 136	3 874,112
(a) In Towns	6 765 014	5 046 890	1 718 194	(b) In Villages	146 150 306	112 900 980	33,249,326
(b) In Villages	58 343 375	45 394 816	13 032 559	Females	164 040 926	120 131,177	34 815 740
				(a) In Towns	14 630 028	11 073,232	3 556 796
				(b) In Villages	140 316 898	109 057 945	31 258 953

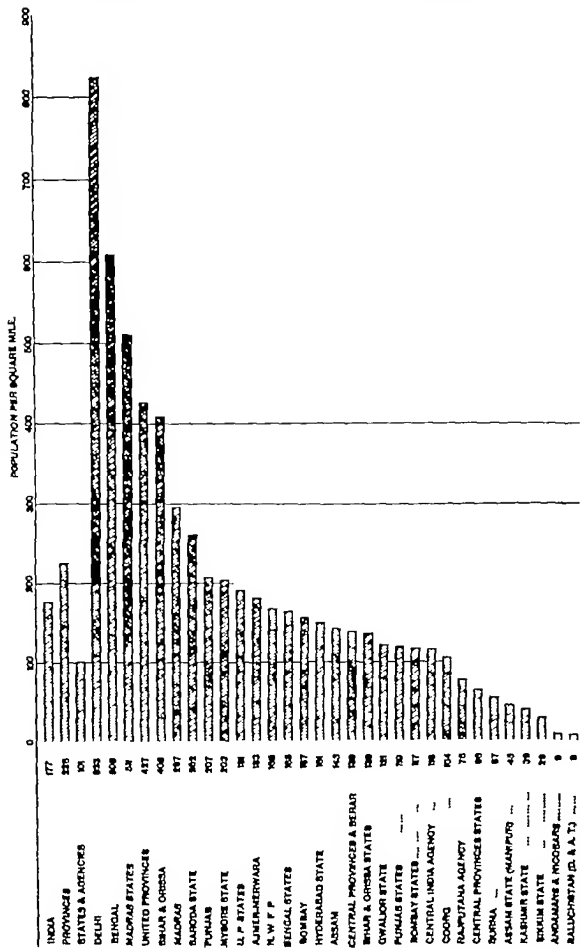
country and the chief political divisions of it. The Indian Empire has an area of 1,805,332 square miles, the area as calculated in the present census exceeding that of 1911 by 2,675 square miles. A statement giving the details of the changes of area will be found at the end of the chapter. About 3,000 square miles have been added owing to the enumeration by estimate of certain tracts in Burma which had been excluded from previous censuses. On the other hand there is a small balance of loss on the figures of the revised survey of different provinces. A population of about 23,000 persons was enumerated in Assam for the first time in remote areas on the north-eastern frontier but unfortunately it has not been found possible to give any estimate of the area with which this population corresponds. Of the total area 1,094,300 square miles, or 61 per cent lie in British Territory, while the Indian States cover an area of 711,032 square miles, or 39 per cent. The total population is 318,942,480, British Territory containing 247,003,293 persons, or 77 per cent, and the Indian States 71,939,187 persons, or 23 per cent, of the whole population. It is usual to illustrate these figures by comparison with the countries of Europe and in respect of area and population the Indian Empire has been frequently compared to Europe without Russia. The war has however, considerably altered the national and political distribution of countries and the new political map of Europe is perhaps hardly yet sufficiently familiar to form a graphic contrast. Turning further west we find that India with an area about half that of the United States has a population almost three times as large.

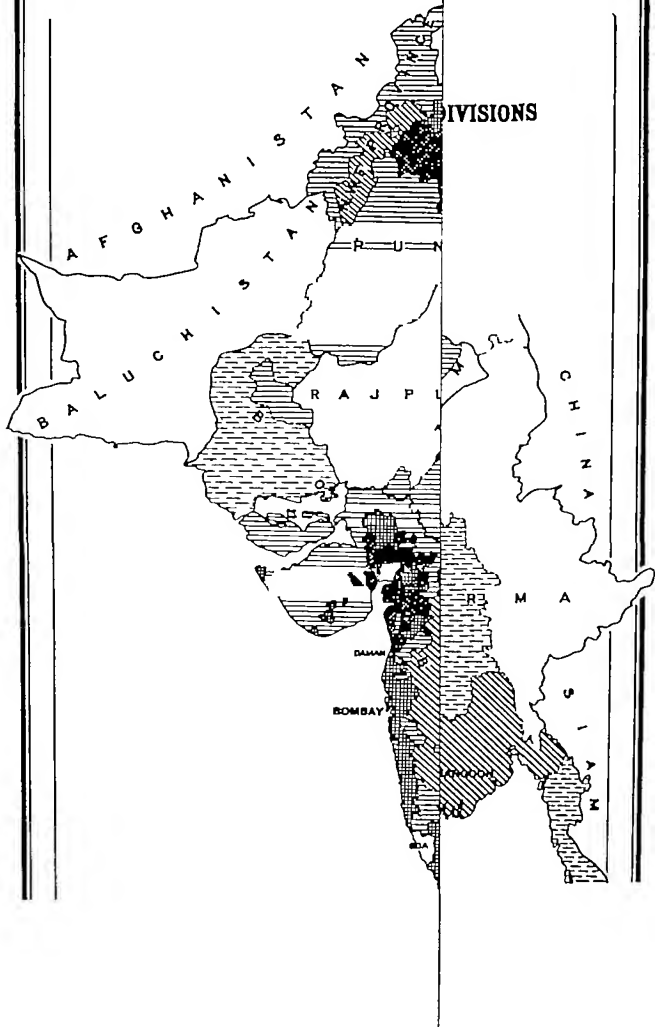
Still more interest is afforded by a comparison in respect of size and population between the Indian Empire and some of the other great Empires of the world's history. Bryce, writing in 1914, observes in contrasting the Roman and Indian Empires*—"The area of the territories included in the Roman Empire at its greatest extent (when Dacia and the southern part of what was then Caledonia and is now Scotland belonged to it) may have been nearly 2,500,000 square miles. The population of that area is now, upon a very rough estimate, about 210 millions. What it was in ancient times we have no data even for guessing, but it must evidently have been much smaller, possibly not 100 millions, for although large regions, such as parts of Asia Minor and Tunisia, now almost deserted, were then filled by a dense industrial population, the increase in the inhabitants of France and England, for instance, has far more than compensated this decline. The Spanish Empire in America as it stood in the sixteenth and seventeenth centuries was still vaster in area. But the population of Spanish America was extremely small in comparison with that of the Roman Empire or that of India, and its organization much looser and less elaborate." The total area of the Russian Empire before the War exceeded 8 million square miles and the population was about 130 million persons. The Chinese Empire has an area estimated at 4,171,000 square miles and a population of about four

* *The Roman and the British Empire. Two Historical Studies* by James Bryce, Oxford University Press, 1914.

Diagram showing the population per square mile by Provinces and States of India 1921

DIAGRAM SHOWING THE POPULATION PER SQUARE MILE BY PROVINCES & STATES OF INDIA, 1921





hundred millions. The Provinces and States of India, as will be seen from the diagram, vary in size and population over a wide range. The largest in extent, Burma, is in area rather smaller than Germany and rather larger than France and has a population about one-third as numerous as that of the latter country. The United Provinces is about the same size as Italy but has a rather larger population. Bombay resembles Spain in area and has a population equal to that of Spain and Portugal together, while Assam, the smallest of the major provinces, has an area rather larger than that of England and Wales and a population which compares with that of Switzerland. Of the larger states Hyderabad and Kashmir have each an area nearly as large as that of Great Britain without Ireland though their combined population is not much more than one-third of that of Great Britain alone.

5 Over the whole of India the population per square mile averages 177, the mean density in the British Provinces being 226 and in the States 101. The manner in which the population is distributed over the whole Empire is graphically shown in the map opposite. The average densities of the individual provinces and states are shown in the diagram opposite. These averages are of general rather than scientific interest and cover an infinite variety of different conditions. Similar figures of some of the other countries of the world are given in the margin for comparison. If we take the districts (and small states) as a unit and exclude cities, the mean density ranges between a minimum of 1 and a maximum of 1,882 per square mile. On the basis of provincial natural divisions we obtain a classification of density shown in the following table —

Belgium	654	Distribution of the Population
England and Wales	649	
France	184	
Germany	332	
The Netherlands	544	
Austria	199	
Spain	107	
Japan	215	
United States	32	
New Zealand	118	

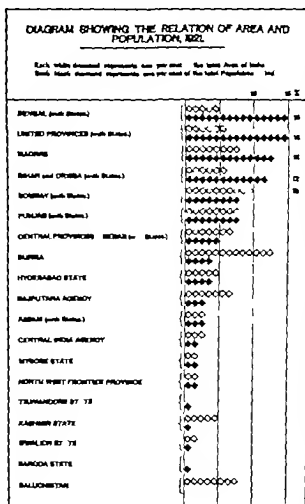
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Serial No	Density by Natural Divisions in groups	Number of Natural Divisions in each group	Area (in square miles)	Percentage of each group on total area	Population	Percentage of each group on total population
Below mean	1 Below 44	11	462,195	26.5	8,828,790	2.8
	2 44-89	4	100,046	5.8	7,217,510	2.3
	3 89-142	18	411,738	23.6	47,924,530	15.5
	4 142-159	8	224,857	12.9	34,191,292	11.0
	5 159-177	1	8,533	0.5	1,407,036	0.5
	<i>India 177</i>					
Above mean	6 177-195	4	86,122	5.0	16,005,815	5.2
	7 195-212	4	23,350	1.3	4,712,876	1.5
	8 212-266	3	36,269	2.1	8,129,756	2.6
	9 266-310	4	71,635	4.1	21,145,012	6.8
	10 310-354	1	31,526	1.8	10,866,740	3.5
	11 354-443	6	86,080	5.0	35,001,142	11.3
	12 443-531	4	69,806	4.0	35,636,092	11.5
	13 531 & over	11	129,274	7.4	79,114,156	25.5

Thus about one-third of the population occupies rather more than two-thirds of the area at a density below the mean of the country, while one-sixth of the area is occupied by nearly half the population at a density of over 350. The centre of area is on the boundary line of the Bhilsa district of the Gwahar State at Lat $23^{\circ} 55' N$ and Long $78^{\circ} 10' E$. The centre of the population is in the Jubbulpore district of the Central Provinces at Lat $23^{\circ} 36' N$ and Long $80^{\circ} 4' E$.

The unequal distribution of the population of India is due to a variety of causes which have been fully analysed in previous census reports and need not again be discussed in detail. In order to increase and multiply man must have certain essential conditions—water, food, clothing and shelter, a climate not fatally unhealthy and sufficient security of life and property to make it possible for him to settle and abide. All these factors interact on one another and the absence of any one of them may counteract the influence of the others. In India, where the economic conditions are closely connected with the cultivation of the soil, the physical configuration of the area must form a primary factor, as continuous cultivation is impossible in a rocky or mountainous country. We shall expect to find the larger aggregation of population in the level tracts of the country.

and it is in the northern portion of India, the valleys of the Indus, Ganges and Brahmaputra and the plains of Rajputana, that such continuous tracts of level



country chiefly exist. Within such tracts the principal factor must usually be the rainfall which supplies the water necessary to fertilize the soil, and subject to definite modifications caused by other influences, there is a distinct general correlation between the density of the population and the quantity of the rainfall. Thus the sharp contrast between the extremes of density in Eastern Bengal on the one hand and the sparsely inhabited areas in the plains of the Indus Valley on the other is largely due to the difference between unflinching abundance and permanent deficiency of rain. In Eastern Bengal, where the density of population rises as high as over 1 000 persons per square mile in certain tracts, every factor favourable to the growth of an agricultural population reinforces the dominant influence of an abundant and stable supply of water from the heavens. The level tract of country with its fertile alluvial soil is drained by a system of large rivers. These carry away the surplus water and prevent the waterlogging and consequently unhealthy conditions which retard

the growth of the population in Western Bengal where the rainfall is equally good but the physical configuration of the country is not so favourable. On the other hand the complete absence of rain in large portions of the Indus Valley and the plains of northern Rajputana render these tracts uncultivable and consequently uninhabitable, except where water is supplied by artificial irrigation. Between these extremes the density figures range in every variety of gradation. In the broad and fertile valleys of the Ganges and Jumna, as well as in the plains of Gujarat the country is level and continuous cultivation is possible, but here, as well as over the peninsula generally the rainfall, while ordinarily sufficient for cultivation, lacks stability in respect both of its periodic seasonal and local incidence. A complete failure of the monsoon, such as that of 1900 over the central tracts of India, will produce intense and widespread famine which suspends the whole economic machinery while badly distributed rainfall will cause local scarcity which if continued year after year as in parts of the Deccan and Karnatak will seriously retard the prosperity of the tract. In the central tracts south of the Ganges Valley the physical aspects of the country change and the lower ranges of density which prevail in this portion of the continent are primarily due to the less favourable configuration of the surface. The undulating plateaus of Central India and the central portions of the peninsula proper are broken by ranges of mountains sometimes bare and stony and sometimes forest clad, and are intersected by rivers and streams which flow for the most part through deep cut valleys. There is little scope for large continuous stretches of cultivation communications are often difficult while occasional failure of the rainfall intermittently checks the growth of the population even where there is ordinarily room for it to expand. Nearer the coast the conditions are more favourable. In the Gujarat plains the density rises to nearly 300 the Kara district having a density of 413 persons per square mile. In the coastal tracts of the South where

the physical features are specially favourable and the monsoon stable, the standard of aggregation is more akin to that of the Ganges Valley. The Godavari district of the East Coast has a population of 578 per square mile and the Malabar district of the West Coast a density of 585, while in the small state of Cochin, where physical and economic conditions are specially favourable, the density is as high as 662 per square mile.

But though the general distribution of the population is mainly dependent on physical conditions, there are other factors which have added their influence to these. The analysis of the factors of density made in the report of 1911 shows how the history of a tract has served to encourage the expansion of the population, as in the Ganges Valley which was the principal habitat of the chief civilising dynasties of India, or retard it, as in the case of Burma and Assam, where the absence of law and order till recent times interfered with the settled life of the people, or of the Central Provinces, where the country has comparatively lately been opened out by railway and road and colonization is more recent than in the northern tracts. Mention has already been made of the influence of climate in Bengal and the central portion of the continent. Malaria, epidemic and endemic, is the chief agent of mortality in India and its normal intensity seems to depend more on climatic than on economic conditions. Thus besides the western districts of Bengal malaria is specially prevalent in the submontane tracts of northern India and in the hilly and forest portions of the central and southern areas. The influence of irrigation in supplying the deficiencies of the rainfall is seen in the increasing aggregation of population in the canal colonies of the Punjab, the irrigated tracts of the United Provinces and the east coast of Madras, while industrial factors are becoming more and more important as the population moves out of the congested rural tracts to supply the labour required for industrial enterprise, for the tea in Assam, the docks and jute mills of Calcutta, the minerals of Bengal and Chota Nagpur, the cotton of Bombay and the coffee and rubber of southern India.

6 According to the census returns of 1921 the population of India has increased by 1·2 per cent during the decade. The figures of previous censuses with the variations per cent are given in the margin.

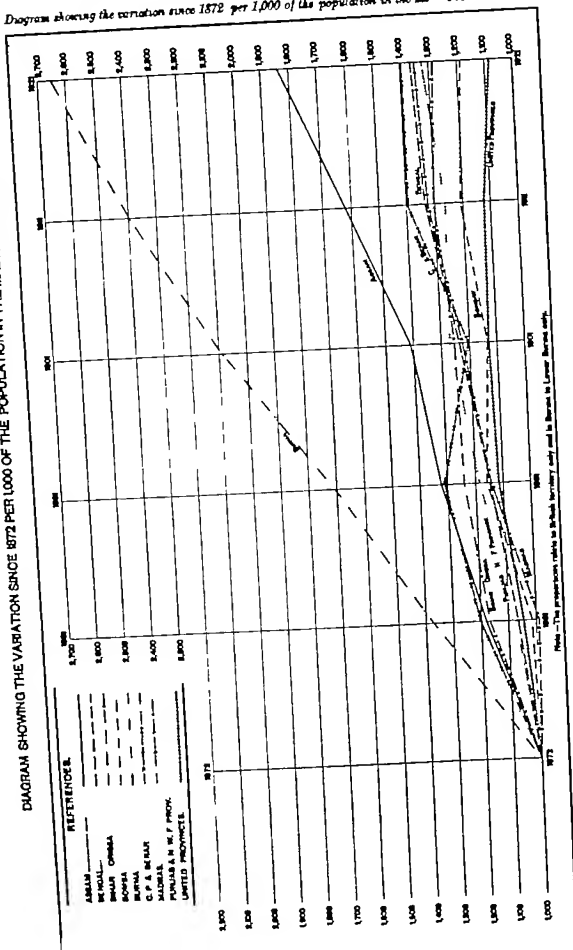
Census of	Population	Variation per cent since previous census
1872	206 162 360	—
1881	253 896 330	+23·2
1891	287 314 671	+13·2
1901	294 361 056	+2·5
1911	315 156 396	+7·1
1921	318 942 480	+1·2

The average increase since the census of 1872 falls at a rate of 5·5 per cent, but the real gain is considerably less than this figure owing to two factors, (a) the additions of area and population included at each census and (b) the progressive increase in the accuracy of the enumeration from census to census. The effect of these factors on the past figures has been discussed in previous census reports and need not be further dealt with here. It is clear that their influence must steadily decline as organized administration extends and the system and practice of enumeration improve.

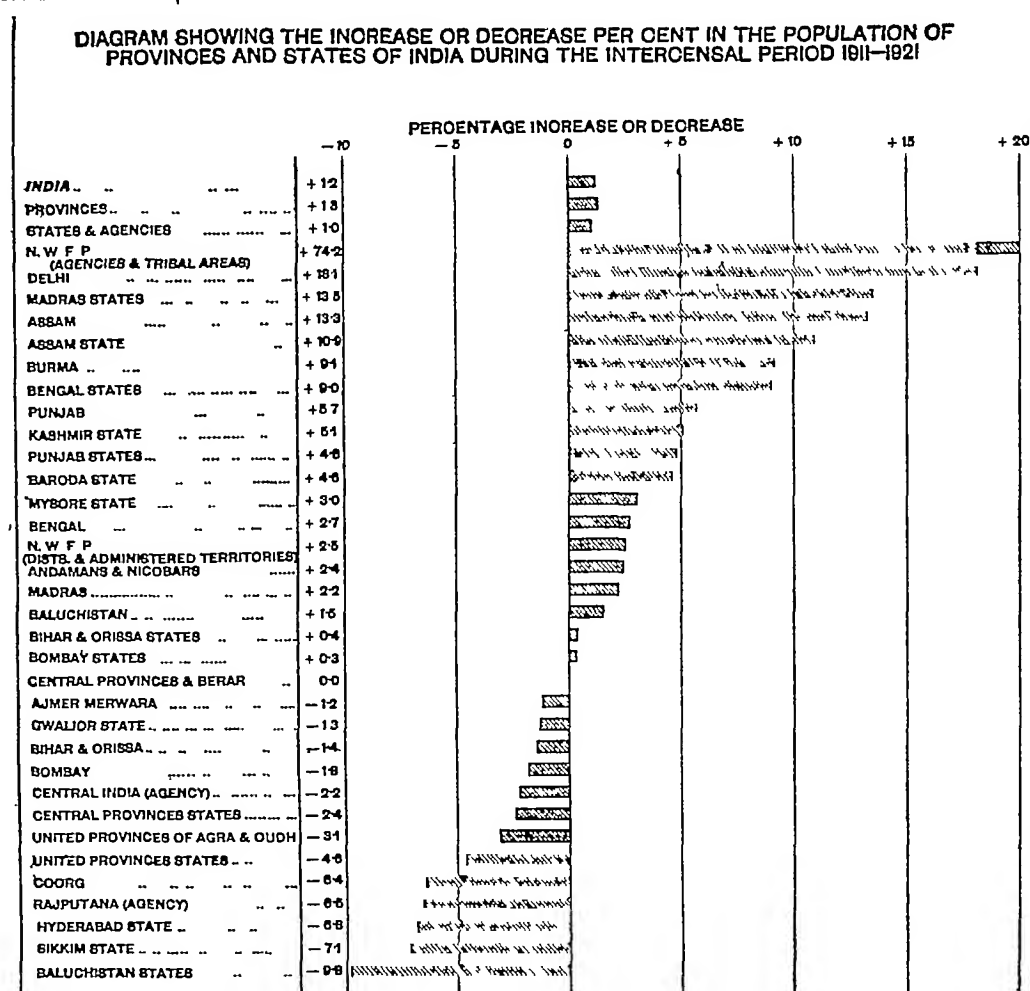
So far as the present census is concerned the additional area and population included amounts to 2,675 square miles and 86,533 persons respectively, while for the present purpose it may be taken that the enumeration of 1921 was, as regards numbers, as accurate but not more accurate than that of 1911. The general result, after allowing for the factors of extension and accuracy, is given in the marginal statement. The real increase in the population during the last 49 years is thus estimated at about fifty-four millions or 20·1 per cent.

Period	INCREASE DUE TO		Real Increase of population	TOTAL	Rate per cent of real increase
	Inclusion of new areas	Improvement of method			
	millions	millions	millions	million	
1872-1881	33·0	12·0	3·0	48·0	1·5
1881-1891	5·7	3·5	24·3	33·5	9·6
1891-1901	2·7	2	4·1	7·0	1·4
1901-1911	1·8		15·1	20·5	6·4
1911-1921	1		3·1	3·8	1·2
TOTAL	43·3	15·7	33·8	112·8	20·1

Diagram showing the variation since 1872 per 1,000 of the population in the main Provinces



The variations in the whole of India and the main provinces and states are exhibited in the diagram below and the diagram opposite, also in the map which forms a frontispiece to this volume



It will be noticed that the increase in the decade was slightly greater in the British districts (1.3) than in the States (1.0), and that in the larger provinces the variations range from an increase of 5.7 per cent in the Punjab to a decrease of 3.1 per cent in the United Provinces. The steady rate of expansion in the provinces of Assam, the Central Provinces and Burma during the last 50 years was the subject of the following remark in the report of last census —

“Lower Burma has grown by 135 per cent since 1872 and the whole Province, including Upper Burma which was annexed in 1886, by 37 per cent since 1891. In Assam including Manipur the increase since 1872 amounts to 70 and in the Central Provinces and Berar to 47 per cent.”

Assam and Burma again show comparatively high rates of increase. Immigration is an important factor in the rise in Assam but neither of these two provinces were exposed to an invasion of the influenza equal in virulence to that which wiped off the whole of the natural increase in the Central Provinces and Berar, Bihar and Orissa and Bombay and substantially reduced the population in the United Provinces, the Rajputana and Central India Agencies and the Hyderabad State. The epidemic was severe in the North-West Frontier areas and in parts of the Kashmir State. The stimulus given to agricultural prosperity in the Punjab by the large expansion of canal irrigation has done much to neutralise the effects of the high death-rate in 1918, as is shown by the rapid recovery of the birth-rate after that year. In Bengal and Madras unhealthy conditions were more localised than in the central and western tracts and development of population was only partially retarded, the expansion of population in the coastal districts of south India being considerable and amounting to nearly 17 per cent in the Travancore State.

Migration.

An obvious factor influencing the variation of population in any area is the physical movement of people in and out of that area. So far as the whole of India is concerned this factor is impossible to estimate exactly and in any case is not of real importance. The statistics of birth places in Imperial Table XI give complete figures of those who were born outside and enumerated within India but the numbers of those natives of India who at the time of the census, were residing in Persia, Afghanistan, Nepal, China and other Asiatic countries in which no census is taken are not known. It was shown, however in paragraph 87 of the report of 1911 that on such figures and estimates as are available the excess of emigration over immigration in India might be placed roughly at about 581 000 persons in 1911. The number of immigrants into India from outside has decreased from 650 thousand in 1911 to 604 thousand at the present census or by about 46 000 persons. As regards emigration the excess during the decade in the number of soldiers and students who have left for foreign countries is probably more than balanced by a reduction in the emigration of labour owing to restrictions thereon, while there is no reason to suppose that emigration to other Asiatic countries has increased. Even if the additional loss to India during the decade on the balance of emigration amounts to as much as 130 000 persons, or about double the loss estimated for the previous decade, the figure is of little importance compared with the gain or loss due to natural causes, depending on the health and well being of the people and shown in the birth and death rate. Before studying these causes, it will be well to review briefly the general circumstances of the decade which were likely to affect the growth of the population.

The War

8 While many of the factors and conditions set out in the next paragraph are in directly due to the war the war itself had little direct effect on the population of India. Such effect could operate in three ways (1) by death casualties, (2) by increasing the number of persons outside India at the census, and (3) by decreasing the birth rate. The actual number of death casualties among the officers and ranks of Indian Army units and labour corps was 58,238. The maximum number serving out of India in combatant and labour units at any one time between 1914 and 1919 was, approximately Indian troops 250 000 labour corps 230 000 total 480 000 the number about the time of the census being troops 103 000 labour corps 70 800 total 173 800. A fair proportion of combatants was drawn from the fighting rates of the Punjab and some statistics for that Province are given by Mr Middleton in his report. He writes as follows—

It comes as a shock to the imagination to compare the mortality directly caused by the war with that due to natural causes though war casualties were amongst the pick of the population they were numerically insignificant when contrasted with the death-roll caused by the slightest of epidemics. Indeed it is undoubtedly true as observed by Mr Leigh that the war added more losses to the Punjab owing to the collection of men in cantonments where the ravages of influenza in 1918 were met by efficient medical precautions and remedies than it wasted in the field of battle. It is possible that the absence of so large a proportion of fit able-bodied men from their homes indirectly affected the population by lowering the birth rate but so many of these men were able to visit their homes on leave that the effect was not great enough to be recoverable from statistics. With regard to its effect upon the numbers of the population in the almost negligible factor in a decade which in itself will render unique in history a long civilisation has.

Other provinces contributed their quota to the labour corps which were sent across the sea and local figures are affected especially in the North West Frontier Province by the distribution and movements of troops but so far as the larger totals are concerned the war is not a direct factor of any importance in the census in any province.

Economic conditions of the decade

9 In considering the factors which determined the movement of the population the decade may conveniently be divided into two periods, (a) a fairly normal period from 1911 to 1917 and (b) the disastrous epidemic year 1918 accompanied by scarcity and followed by a second crop failure in 1920. As will be seen the war hardly began to affect the ordinary life of the people till about the third year after its outbreak. Agricultural conditions during the earlier period were on the whole favourable. In 1911-12 and 1912-13 there was a serious shortage of rain in parts of the Bombay Presidency resulting in scarcity conditions over certain areas of the East Deccan but on the whole insufficient rainfall was confined to restricted localities. The year 1913-14 was abnormally

day The United Provinces and Central Provinces suffered from an early cessation of the monsoon rain of 1913, which caused a fall in the outturn of wheat, and there was some distress in parts of the former Province. In 1914-15 the rainfall, abundant and well distributed in the centre and north and east of the country, was unfavourable in the eastern portions of Bengal and in Madras and Burma and the rice crop was somewhat below normal. Rainfall in 1915-16 varied considerably over the country, the heavy late rain causing floods in the Eastern Provinces and parts of the United Provinces and Central Provinces, but on the whole the harvest of the year was fair and the rice crop was above the normal. The monsoon of the two following years was heavy and well distributed and both wheat and rice were exceptionally good, giving a large outturn on a full acreage. Cotton and jute, the principal mercantile crops, were both below the average in 1913-14 and 1915-16, but in the case of these crops the higher prices obtainable in a poor year tend to recoup the grower in value for what he loses in quantity. Meanwhile the economic conditions in India were gradually undergoing a change. The outbreak of war in 1914 caused an immediate decline in the bulk of India's foreign trade by the contraction of shipping. The influence on prices was not felt severely during the first two years of the war, fair harvests and full stocks keeping the prices of foodstuffs from any considerable movement. In 1917 however the conditions of India began to respond to the world-disturbance of the war. Men for the fighting and labour units and food, munitions and war material of all kinds were demanded. The strain on the railway organization dislocated the local markets and the distribution system in the country began to give trouble, while the rising prices of imported necessities such as salt, oil and cloth hit the poorer classes severely. The harvests of 1917 were good but the year was wet and unhealthy and a virulent outbreak of plague in the north and west of India caused heavy mortality. Wages had not yet begun to move with the upward movement of prices and there was a general feeling of restlessness among the labouring classes, which rapidly increased under the influence of political propaganda. Then followed the disastrous seasons of 1918-1919. The monsoon of 1918 was exceptionally feeble and gave practically no rain after the beginning of September. In the Punjab and the central and western portions of the continent the crops failed over considerable areas and scarcity, aggravated by the high level of prices, was declared in parts of the Punjab, United Provinces, Central Provinces, Bombay, and Bihar and Orissa, while agricultural conditions were equally bad in parts of the Hyderabad and Mysore States. The outturn of rice fell from nearly 40,000 to 24,000 tons while the wheat harvest in the spring of 1919 was equally poor. The crop failure was as bad as, if not worse than, that of 1900 and prices of foodstuffs, cloth and other necessities of life, already high, rose to heights never previously reached. Famine relief organization is now so highly perfected in India that scarcity is not necessarily accompanied by high mortality. But meanwhile the influenza epidemic, starting in the latter part of 1918, visited almost every portion of the country and wiped out in a few months practically the whole natural increase in the population for the previous seven years. Emergency measures were taken. Transport, the export of foodstuffs and the distribution of the necessities of life were all placed under Government control, and it was only the wonderful resisting power of the people, acquired from years of steady economic improvement, that enabled the country to tide without absolute disaster over a year of unprecedented difficulty and strain. These conditions lasted through the first half of 1919, but an abundant though not very well distributed monsoon in that year brought some welcome relief, though prices remained high and it was necessary to stop all export of food grains and to reinforce the stocks of the country by importing wheat from Australia. The monsoon of 1920 was poor, the autumn rains failed and the winter rains were in defect. Famine was declared in one district in Bombay and scarcity in another district of that Province and in seven districts of the Central Provinces. Famine conditions in Hyderabad were pronounced and distress prevailed in certain districts of Madras. By the end of 1920 nearly 100,000 persons were on relief and generous remissions of revenue had to be given. It was not till the end of 1920 and the beginning of 1921 that prices gradually began to come down.

10 Apart from the more normal causes of mortality the distinctive feature of the decade of 1901 to 1911 had been the progress through India of the plague epidemic and the mortality which it caused. **Public Health.** The recorded number of deaths

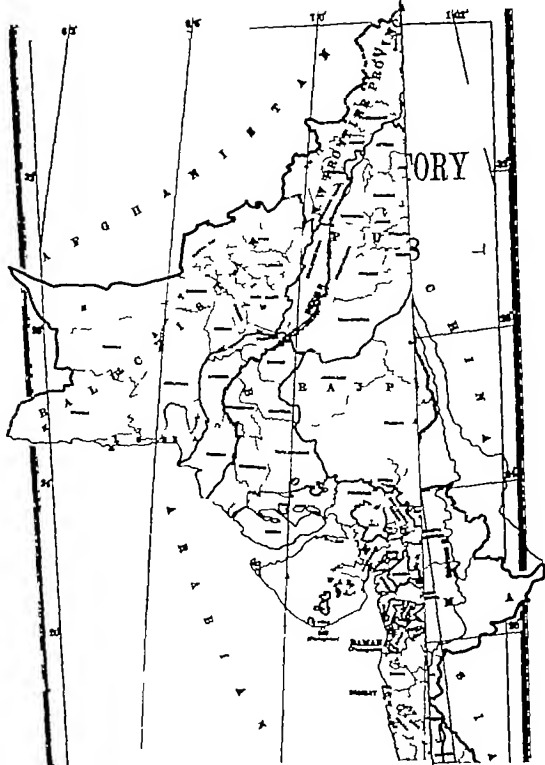
from plague during that period was about 6½ millions. In the recent decade the deaths recorded are less than half that number. There were however serious outbreaks of plague in Bombay the Punjab the United Provinces and the Central Provinces in the first two years of the decade the mortality was again high in 1915 and higher still in 1917 and 1918 when the disease was severe in practically every part of northern and central India. Cholera is normally most prevalent in the Eastern Provinces. It was specially virulent in Assam and in parts of Bihar and Orissa and Bengal, while in several provinces outbreaks of the disease either accompanied or immediately followed the influenza epidemic. Cholera in its most severe form has usually been associated with the deterioration in physique which accompanied famine conditions before famine organization had been perfected. Virulent as the epidemic can still be when its hold is established it is now usually of a temporary and local nature, and the total death-rate in British India from the disease during the decade did not amount to more than 1.5 per cent. By far the largest number of deaths in India are entered under the category of fever and allowing for inaccuracy of diagnosis it has usually been assumed that about two-thirds of the deaths so recorded may be ascribed to malaria. Recent investigations made in special areas, however suggest that this proportion has been considerably over-estimated and that malaria only accounts for from one-fifth to one-fourth of the number of reported fever cases, the remainder being cases of dysentery pneumonia, phthisis and other diseases. Malaria is endemic in large areas of the continent both in the forest clad country which fringes the mountain ranges and in tracts of Bengal, Assam and Burma, where the configuration of the country prevents the drainage of the flood-water after the monsoon. In such areas, besides raising the average level of the death-rate, it permanently lowers the vitality of the people and reacts both on the birth rate and on their general economic condition. In parts of western Bengal the population has been described as sodden with malaria. Epidemic malaria was specially severe in the Punjab and United Provinces in the earlier years of the decade and again in 1917 when, owing to the specially heavy monsoon, mortality from this disease was high in almost every province. In the last few years the prevalence of an affection which is the cause of considerable mortality called *Relapsing Fever* has received considerable attention by the Health Department. This disease has been diagnosed as common in most parts of the country specially in the northern provinces and in the Central Provinces and Berar and Bombay but the extent of the mortality which can be ascribed to it cannot at present be estimated. Nor can figures be given of phthisis which is undoubtedly responsible for considerable mortality especially in the towns of western India, the deaths from this disease in Ahmedabad amounting in 1918 to 5 per mille of the population.† All other factors in the health of the people have, however been over shadowed by the influenza epidemic of 1918 and 1919 which has dominated the population figures at the present census.

The Influenza epidemic of 1918-1919.

11 The influenza epidemic of 1918 invaded the continent of India in two distinct waves. The first infection apparently radiated from Bombay and progressed eastward from there but its origin and focus are uncertain. It may have been introduced from shipping in Bombay during May and there is a suggestion of some sort of mild influenza in the Bombay district Delhi and Meerut in the spring but the existence of the disease in epidemic form cannot be established without doubt before June. The disease became general in India in both the military and civil population during August and infection spread rapidly from place to place by rail road and water. The first epidemic was most prevalent in urban areas, but it was not of a specially virulent type and probably for that reason it is said to have affected young children and old people most severely. The mortality curve went to a peak in July and then dropped and there is evidence of a distinct interval between the first and second waves but not of any real break of continuity as sporadic cases were reported throughout the intervening period. It is impossible to say where the more virulent virus of the second invasion came from. There are certain facts which suggest that the disease began in the Poona district in September. It spread from

From the *Times* by Sir L. Rogers, 2nd ed. vol. p. 20.

† F. de Salazar. *India* by A. Laakster (1919) Pattenworth & Co. 1920.



province to province, lasting in a virulent form generally from eight to ten weeks, when mortality, usually due to respiratory disease, reached its highest point. The rural areas were most severely infected, the reason probably being that while villages have little advantage over towns in the matter of overcrowding, sanitation and ventilation the urban areas have the benefit of qualified medical aid and organised effort. Mortality was specially high among adults (20-40), particularly among adult females, the disease being generally fatal to women in pregnancy. It is suggested that the high mortality among women may have been due to the fact that, in addition to the ordinary tasks of the house, on them fell the duty of nursing the others even when themselves ill. The figures show that the excess mortality between the ages 20 and 40 amounted in some cases to nearly four times the mean. It is no exaggeration to say that at the worst period whole villages were absolutely laid desolate by the disease. There was sometimes no means of disposing of the dead, crops were left unharvested and all local official action was largely paralysed, owing to the fact that the majority of the official staff were put out of action by the epidemic. To add to the distress the disease came at a period of widespread crop failure and reached its climax in November when the cold weather had set in, and, as the price of cloth happened at the time to be at its highest, many were unable to provide themselves with the warm clothing that was essential in the case of an illness that so readily attacked the lungs. The disease lasted in most provinces well into 1919 and gave a high mortality in that year in Bengal and the United Provinces. Even after it had subsided there were in the Central Provinces, Bombay and Burma mild recrudescences later in the year, while local outbreaks continued over the country during the next two years.

The comparative severity of the epidemic in the different parts of India is shown in the map on the opposite page*. It is not possible to explain the peculiar variations in the local prevalence of the disease which seems to have been entirely capricious in its incidence. The coast line escaped with a low mortality while in the hilly country the disease was usually specially fatal, though this was apparently not always the case in the Punjab. The Eastern Provinces escaped lightly and Calcutta was not attacked as severely as other cities. It has been suggested that the mortality was determined by the comparative liability of the people to respiratory complications or, in other words, their susceptibility to pneumonia, and it looks as if the epidemic was more virulent in a cold dry climate than where there was comparative warmth or humidity.

There is no direct means of ascertaining the mortality from the epidemic. Influenza was unknown to the registration staff as a specific form of illness and the deaths were entered under the heads fever or respiratory disease. Various estimates have been made based on the excess mortality over some suitable mean. The average of these calculations gives a total number of deaths in the areas under

Province	Estimated number of deaths	Death Rate per mille of population of column 2
Ajmer Merwara	29 830	50 5
Assam	111 340	18 0
Bengal	386 572	8 5
Bihar and Orissa	709 076	20 5
Bombay	1 059 497	54 9
Burma	137 401	13 9
C P and Berar	924 949	66 4
Coorg	2 014	11 5
Delhi	23 612	50 6
Madras	682,160	16 7
N W F Province	89 035	47 6
Punjab	898 947	45 4
United Provinces	2,034 257	43 4

registration of about 7,100,000 in 1918, as shown in the marginal Table, to which must be added, as the results of similar calculation, another $1\frac{1}{2}$ million deaths in 1919, giving a total recorded mortality of nearly $8\frac{1}{2}$ millions in the two years. Even this, however, must be a substantial underestimate since, owing to the complete breakdown of the reporting staff, the registration of vital statistics was in many cases suspended during the progress of the epidemic in 1918 and when the time came to reconstruct the figures the number of omissions, especially in the case of women, must have formed a high proportion. In some cases the Census Superintendents give estimates of deaths considerably higher than those given in the margin, which are taken from the Sanitary Commissioner's report and, as we shall see in paragraph 14 below, there is a difference of nearly 4 millions between the census figures and the deduced population, a considerable proportion of which must be due to omissions of influenza deaths. In any case the figure given above applies only to the areas under registration, which contain

* Reduced from a larger map in the India Sanitary Report of 1918

little more than three-quarters of the population of India. The epidemic was especially virulent in the Rajputana and Central India Agencies and in the States of the Punjab, Central Provinces and Bihar and Orissa while the attack was severe in Kashmir and Mysore and acute in Hyderabad and parts of Baroda. We have no statistics for these areas, at any rate none that are trustworthy but a rough estimate would put the direct mortality in them from the disease in 1918 and 1919 at least in the same proportion as in British territory. We thus arrive at a total mortality of between 12 and 13 millions for India. It is interesting to note that even this conservative estimate of a mortality the large part of which occurred in the space of three or four months exceeds by nearly two millions the total estimated deaths from plague extending over 20 years (1898—1918) and is a good deal more than double the death rate directly attributable to the famines of the period 189—1901. The number of deaths however is not, of course the measure of the loss of life from the epidemic. The case mortality has been put roughly at about 10 per cent. and on this basis the total number of persons affected by the disease was about 125 millions or two-fifths of the total population of India. The effect on the general health of the people is shown by the reaction on the birth rate which dropped below the death rate in 1918 and 1919 and only gave a slight excess in India in 1920.

Vital Statistics.

12. The cumulative effect of the various health factors on the vitality of the population is shown in the variations of the birth and death-rates, but before making a use of the recorded vital statistics it will be well to form some estimate of the accuracy and value of the records. The registration of vital statistics is established throughout British India except in the more remote and backward tracts. The system of collection differs in detail in different Provinces. It is usually based on information of births and deaths recorded in the village (often by the headman of the village) and passed on periodically to some local authority—usually the police, by whom registers are maintained. Extracts from these registers are sent to the local officer who is responsible for the records of public health, by whom they are compiled for the district and so eventually for the Province. The information includes particulars of the births, including stillbirths, and death by sex and religion and the classification of the deaths under certain categories of age and of disease. The records both in the villages and in the local offices are periodically checked by touring officers of various departments. In municipal towns the registration of vital occurrences by the household is usually compulsory by law and the registers are maintained by the municipal authority. Owing chiefly to carelessness in administration the standard of accuracy is probably not as high in the towns as in the rural areas.

Attempts have from time to time been made to gauge the extent of errors by placing certain

Estimated and reported birth and death rates

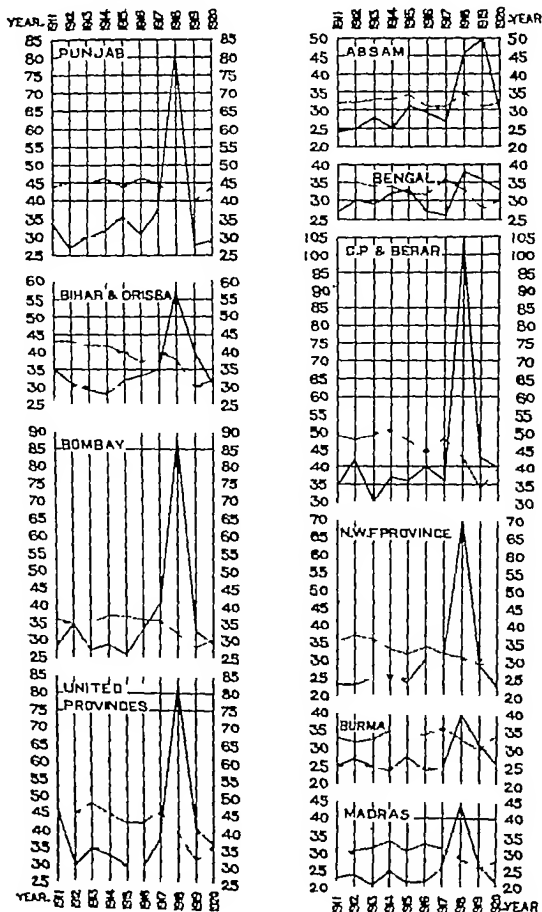
	Actual	Reported	Difference	Actual	Reported	Difference
		Monthly			Monthly	
Bombay	44	37	7	44.9	33	11.9
Bengal		32	12	37.7	23	14.7
Madras	42	32	10	33	23	10
Punjab		36		37.3	44	—
United Provinces	44			44.6	36	8.6

tracts under special staff responsible for watching the reporting, but such attempts are themselves full of difficulties and their conclusions have not been accepted as of any final statistical value. The results of some attempts of this kind are described in Appendix II to Chapter V of the Bengal report. The percentage of omissions found varied considerably in different regions and the samples can hardly be considered altogether representative because, on the one hand, the estimation of the vital statistics was usually performed by staff engaged on fever investigation in tracts which were specially unhealthy and on the other hand, the presence of the enquiring staff probably stimulated the reporting agency to greater accuracy. Statistical analyses based on comparison between the recorded birth and death-rates and the population and age distribution according to the census, do afford a valuable means of check. Comparing the estimated birth and death rates given by Mr. Vaidya in his statistical report on the 1911 census figures with the reported rates of the decade ending a year later we find that the present omissions in the reported figures vary between 7 and 8 per mill for birth and are slightly less in the case of deaths. Tests made by Mr. Thompson (Bengal) on the basis of a comparison between the population returns and the population deduced from the vital statistics of the decade with allowance for migration, (2) the mean population (3) the statistics of 1911

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DIAGRAMS SHOWING THE BIRTH RATES & DEATH RATES PER MILLE OF THE POPULATION DURING THE DECADE 1911-1920.

BIRTH RATES ---- DEATH RATES ———

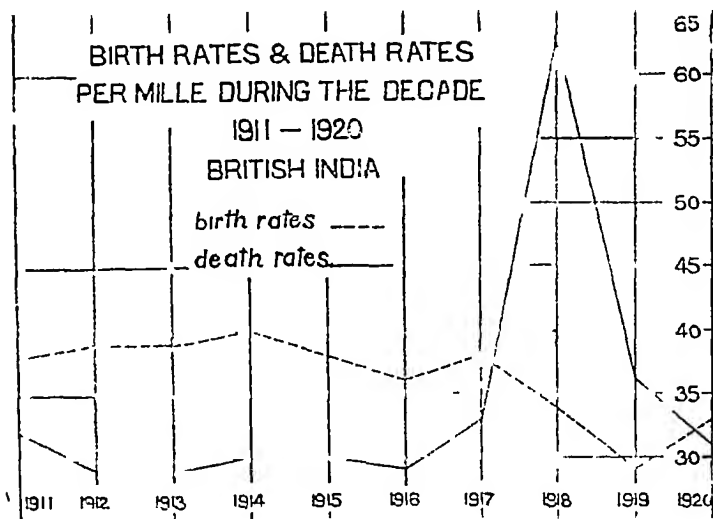


mortality in 1920, the year before the census, and (4) the results of special enquiries into the size and constitution of families suggest the following conclusions as applicable to Bengal — (a) about 25 per cent of deaths that occur remain unreported, (b) the omission in the case of female deaths is ordinarily about 2 per cent more than for males and (c) the omission in the record of births is generally between 1 and 2 per cent more than in the case of deaths. Mr Middleton (Punjab) was able from calculations based on the comparison between the enumerated and deduced population to obtain a correction factor for the errors in birth and death registration in different districts which varied from 5 to 16.6 per cent in the case of death-rates and 9 to 29.1 per cent (omitting one especially defective case) in birth registrations. In reviewing these calculations Mr Jacob in Appendix I to the report has suggested some amendments in the working and on even more elaborate calculations of his own has arrived at the following conclusion — “that the vital statistics of the Punjab are likely to be about 7 or 8 per cent in error, and that, provisionally, errors of about 11 per cent in the birth-rate and of say 5 per cent in the death-rates may be adopted as probable. Finally it is clear that the census figures of 1911 and 1921 do not establish the accuracy of the vital statistics to a greater degree of accuracy than 7 or 8 per cent of error.”

As a result of the various tests which have been made and of the general experience of those who are in the best position to estimate the value of these records the following propositions may perhaps be accepted —

- (1) In rural areas the omissions in the record of *numbers* vary up to about 20 per cent
- (2) The record of births is normally less accurate than that of deaths
- (3) In urban areas the standard of accuracy varies greatly according to the attention given by the local authorities. It is usually lower than in rural areas but it has been considerably improved of recent years, *e.g.* in Poona and Ahmednagar
- (4) The records of the causes of mortality are defective. Plague, cholera and small-pox are now often fairly correctly recorded when the epidemic is established. Other distinctions (*e.g.*, deaths from respiratory diseases) are sometimes roughly made, but the bulk of deaths, the specific cause of which is not recognized locally, are ascribed to “fever.” Age categories are, outside a certain limit, a matter of guess work but the errors are probably of the same kind as those in the census tables
- (5) Except for progressive improvement in urban areas and occasional breakdowns during epidemics the errors are more or less constant from year to year

13 In these circumstances, while the records of vital statistics are of little use as absolute figures, they are still, specially for rural areas, valuable for purposes of comparison and in estimating progress and tendencies. The fact that the omission of births is greater than the omission of deaths has to be remembered in using the records for estimating the rate of growth or decline of population. Whether we examine the figures in Tables



The progress of population in the intercensal period.

V and VI or the curves in the diagrams opposite which illustrate these figures the same feature stands out, *viz.*, the rise of the death-rate and the fall of

the birth-rate at the end of the decade owing to the influenza epidemic. We are at

Provinces.	Change between 1901 and 1911	Change yearly excess of births over deaths by per mille 1911-1913	Change yearly excess of births over deaths by per mille 1913-1915	Change between 1911 and 1913
Assam	+		-6	+
Burma	+		-6	+
United Provinces	+4.0		-13	-
Punjab	+14.2	11	-23.1	+
Madras	+		1	+
Central Provinces	-1	12	-4.0	-
Panjab and Provinces		15		-

this point concerned chiefly with the numerical progress of the population and this is best illustrated by the curves in the diagrams opposite which show the combined effect of the birth and death-rates in the form of the survival rate, or the difference between them in each year. The figures in the marginal table illustrate the difference between the progress in the

earlier and later years of the decade respectively. The figures given are obtained by simple arithmetical calculation on the basis of the population figures of 1911 and are an approximation only to the truth and as the reporting of births is generally less complete than that of deaths the difference between the births and deaths, or what may be called the natural increment rates given by the figures is lower than in actual fact. The intensity of the death-rate of 1918 as compared to the mean of the previous years is brought out in the series of curves in the diagram opposite.

The figures and curves indicate that the increase in the population shown by the 1911 census of most of the larger provinces was sustained and continued during the first seven years of the decade so that in spite of epidemics of cholera and plague, which however did not reach the same pitch of virulence as in the previous decade there might have been an increase of population at least equal to if not well above, the proportion shown at the 1911 census but for the calamity of 1918 when the upward curve dropped steeply in each province and only in a few recovered at all during the succeeding two years. Assam, Burma and the Panjab are the only three of the larger units in which a substantial increase in the actual population has occurred. Both the former are provinces which attract a considerable immigrant population from outside. The Punjab suffered less heavily from the influenza epidemic than the United Provinces and the Central Provinces and there was an astonishing recovery in the birth rate in the last two years of the decade. In the Central Provinces the whole of the large natural increase, which is a feature of the backward aboriginal people was wiped out while in the United Provinces the substantial increment in the earlier years was converted into a loss at the end of the decade.

14. Though it has been shown that the absolute figures of the recorded births and deaths are far from complete it will be of some interest to see how these records compare in each province with the figures obtained from the census. The statement below compares the results of the census with the population deduced from the statistics of births and deaths during the decade in the chief areas in which registration is in operation. These areas which covered almost the whole extent of British India contain a population of 240,630,341 persons according to the census of 1911 or about three-fourths of the total population in the Indian Empire.

Comparisons between
censuses and
deaths and
births.

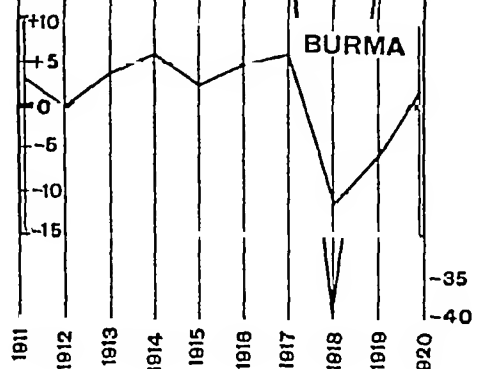
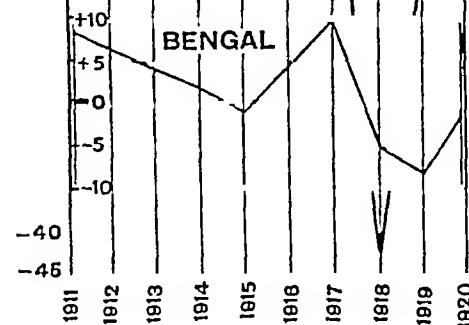
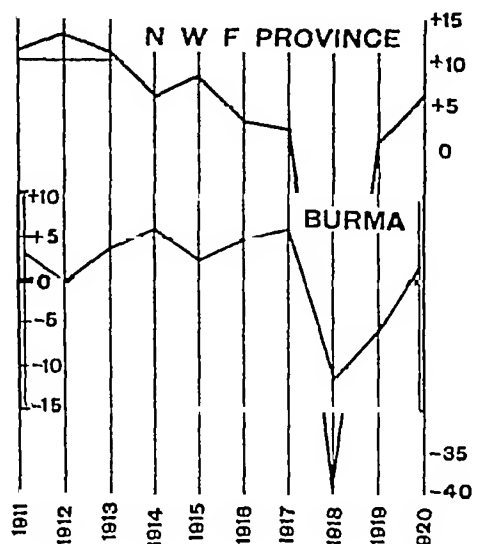
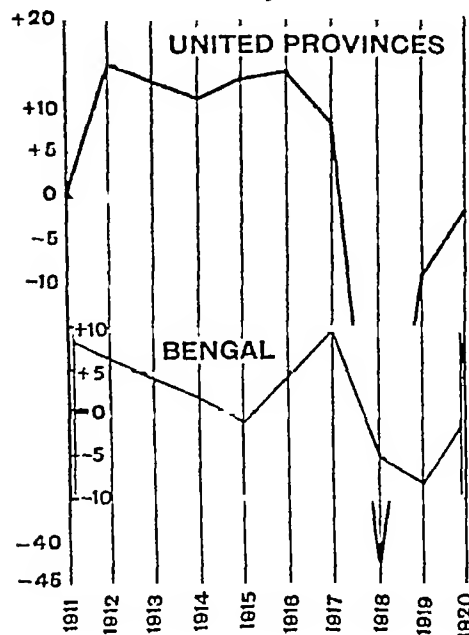
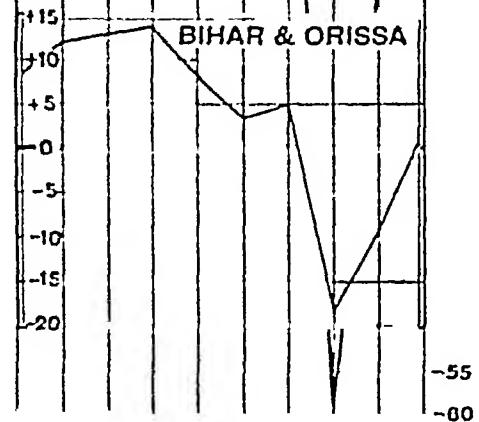
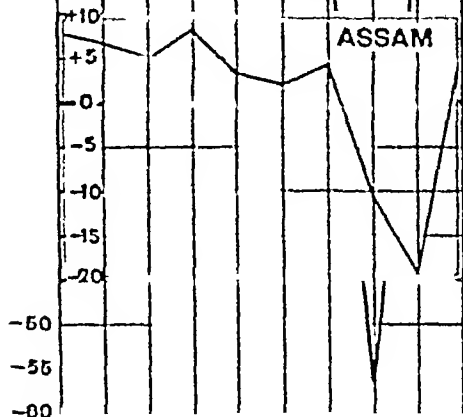
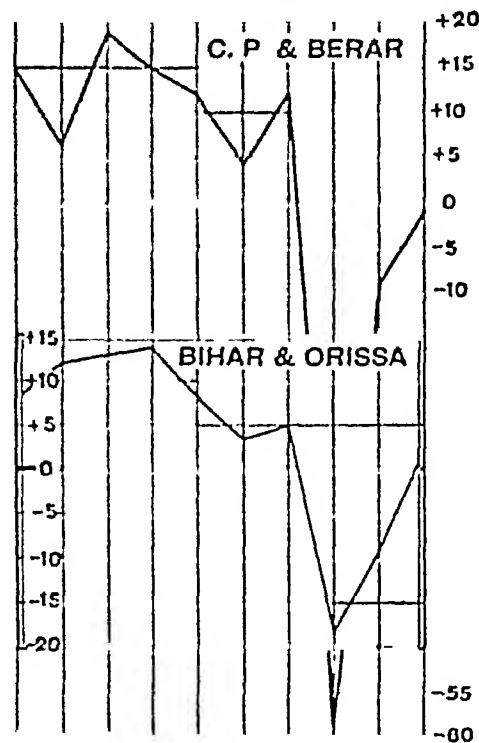
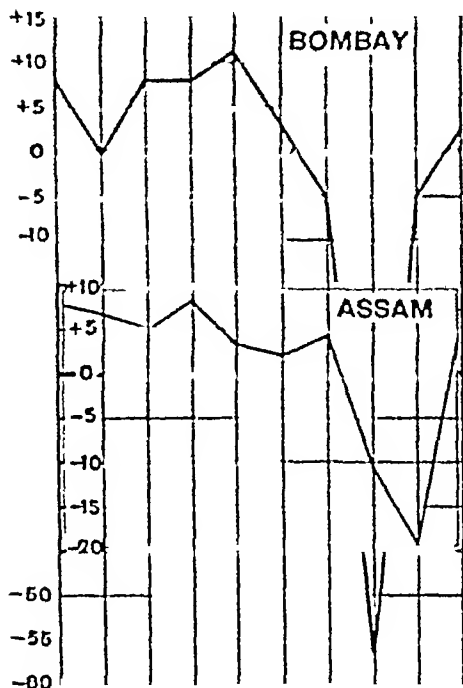
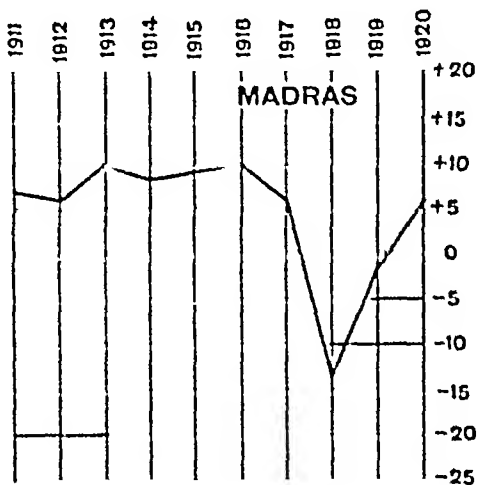
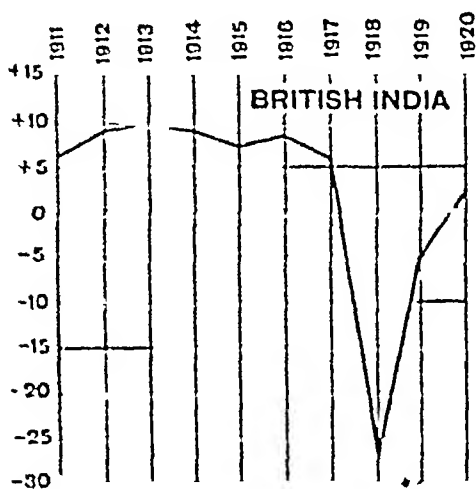
Provinces, British Empire 1911.	IN 1911 100 ACCORDING TO OF STATISTICS (LIVE IN 1911 AND DEATHS)			IN 1911 100 ACCORDING TO TO DEATHS (LIVE IN 1911 AND DEATHS)			DEATHS		
	Total	Males	Females	Total	Males	Females	Yours of death of death	Yours of death of death	Yours of death of death
Assam	88,375	44,187	44,188	88,375	44,187	44,188	88,375	44,187	44,188
Burma	774,000	387,000	387,000	774,000	387,000	387,000	774,000	387,000	387,000
United Provinces	1,041,111	520,555	520,556	1,041,111	520,555	520,556	1,041,111	520,555	520,556
Punjab	1,041,111	520,555	520,556	1,041,111	520,555	520,556	1,041,111	520,555	520,556
Madras	1,041,111	520,555	520,556	1,041,111	520,555	520,556	1,041,111	520,555	520,556
Central Provinces	1,041,111	520,555	520,556	1,041,111	520,555	520,556	1,041,111	520,555	520,556
Panjab and Provinces	1,041,111	520,555	520,556	1,041,111	520,555	520,556	1,041,111	520,555	520,556
Total	6,331,74	3,165,87	3,165,87	6,331,74	3,165,87	3,165,87	6,331,74	3,165,87	3,165,87

(4) Figures calculated on 1911-1912.

(5) Figures for 1911 and 1912 in the same.

DIAGRAMS SHOWING IN INDIA & CERTAIN PROVINCES THE SURVIVAL RATE PER MILLE OF THE POPULATION DURING THE DECADE 1911-1920

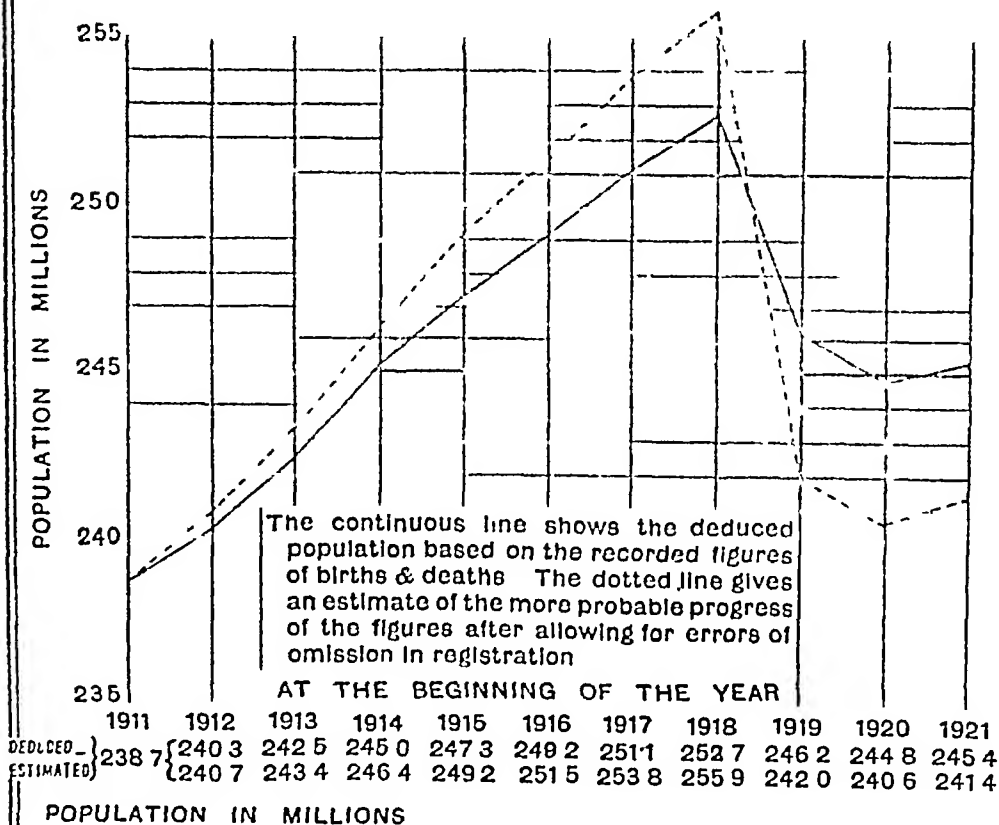
(Difference between Birth and Death Rate EXCESS+, DEFECT—.)



The difference in the tables of the enumerated and deduced populations amounts to a defect in the former of nearly 1,000,000 of persons, the deficiency in females being almost twice as great as that in males. It is clear that, were both the census and registration figures absolutely accurate, this difference would necessarily be due to loss by migration from within to places outside the area under registration, that is, either to the Indian State areas or to places outside India. Now the statistics of birth place enable us to calculate fairly accurately the gain or loss between British districts and the Indian States. At both the recent census and the census of 1911 the balance has been in favour of British India. The gain in 1921 was about 121,000 and in 1911 about 135,000 and the decrease of about 11,000 between these two figures is too small to be considered. The calculation is not so easy in regard to migration to countries outside India, but if the estimate of 150,000 persons lost to India in the decade by the exchange with foreign countries made in paragraph 7 be accepted as fairly correct, the share of that amount which falls to the British India districts does not go far towards making up the difference of four millions now under consideration.

Failing loss by migration the deficiency can only be accounted for by either (a) omissions in the census or (b) defects in the registration statistics. The degree of accuracy of the recent census has been already discussed in the Introduction. We have seen that there is no reason to suppose that the recent census was less accurate than that of 1911 in point of the actual numbers included. In any case there is nothing in the circumstances of the census of 1921 which should account for the larger loss in the female population relatively to males. The deficiency must then be due to inaccuracy in the vital statistics and since we can hardly suppose that the number of births has been overstated, it must be assumed that the inaccuracy has taken the form of the

POPULATION IN THE INTERCENSAL PERIOD, (Areas under Registration-British India)



omission of deaths and that the defect has been almost twice as great in the case of females as in the case of males. It will be noticed that the total deficiency

is a balance of the figures for the different provincial areas, some of which show a gain and some a loss. In the plus and minus account of the individual provinces migration plays an important part thus the provinces which gain by migration e.g. Assam Bengal and Burma show excesses in the enumerated population while those which lose by migration e.g. Bihar and Orissa Madras and the United Provinces show defect. The account for each province so far as it can be computed will be found in the provincial reports. It must suffice here to say that there is a general consensus of opinion, founded, on actual experience as well as on statistical evidence that the registration organization completely broke down during the worst period of the influenza epidemic when there was often neither the village staff to make the reports nor the official staff to receive them. In the reconstruction of the registers some months afterwards it is natural that a large number of deaths should be omitted and in such circumstances deaths of females are more likely to escape recollection than deaths of males.

We may now try roughly to reconstruct the figures of the population of British India in the intercensal period. In the diagram above two curves are given one showing the progress of the population in British India (registration areas) in each year of the decennium based on the actual records of births and deaths. The dotted line gives an estimate of the more probable figures allowing for (a) deficiency in the registration of births in ordinary years and (b) a substantial deficiency in the registration of deaths in the year 1918. It will be noticed that, if we accept this deficiency in the number of deaths registered as explaining the difference between the deduced and enumerated populations the estimate of the number of deaths in 1918 directly or indirectly due to influenza given in paragraph 11 above must be even further increased, so as to account for the drop in the population shown by the fall of the dotted curve between 1917 and 1918 in the diagram. This may well be so as the estimate of mortality based on the official records is undoubtedly a minimum.

Section III—Distribution and variation by Provinces and States

13 With the break up of the province of Eastern Bengal and Assam from the 1st of April 1912, Assam again became a separate province. Effect had already been given to this change in the Census Report of 1911, when a separate report was written for Assam and there has since then been no large change in the political constitution of the Province. The census of 1921 was carried out on the standard lines, a non-synchronous enumeration, lasting in all from two weeks to one month, being necessary in the Manipur State and the more remote and hilly tracts, in all an area of about 4 000 square miles with a population of about three-quarters of a million persons. There were no disturbing features at the time of the census and the Superintendent considers that an extremely accurate enumeration was made of a normal population both in the regular and in the non-synchronous areas.

The province has an area of 61 471 square miles and a population of 7 990,210. Larger in extent than England it carries a population little greater than that of Belgium. The mean density of 130 is about the same as that of the North-West Frontier Province or of Ireland and less than a quarter than that of Bengal Assam's western neighbour. Mr Lloyd writes—

"There are no industrial centres or towns of any size but the distribution of the people varies enormously within the province ranging from 7 per square mile in the Balipara Frontier Tract to over 1000 in part of the Surma Valley. Although these variations are being levelled up slowly their persistence is not to be wondered at. The static conditions of fertile river valleys and vast areas of forest-covered hills have combined with the dynamic effect of past jaundices and wars, drought, earthquakes and epidemic disease to this end."

The marginal statement shows the progress of the population since 1871. There

Provinces and Special areas.	Popu- lation	Popu- lation	Popu- lation	Increase of population per cent.					
				1871	1881	1891	1901	1911	1921
Assam	61,471	7,990,210	730	25	36	46	56	66	76
Barisal	21,118	2,000,000	20	10	15	20	25	30	35
Chittagong	21,118	2,000,000	20	10	15	20	25	30	35
Dacca	21,118	2,000,000	20	10	15	20	25	30	35
Faridkot	21,118	2,000,000	20	10	15	20	25	30	35
Gurgaon	21,118	2,000,000	20	10	15	20	25	30	35
Hoshiarpur	21,118	2,000,000	20	10	15	20	25	30	35
Jalandhar	21,118	2,000,000	20	10	15	20	25	30	35
Kaithi	21,118	2,000,000	20	10	15	20	25	30	35
Karnal	21,118	2,000,000	20	10	15	20	25	30	35
Kashmir	21,118	2,000,000	20	10	15	20	25	30	35
Khanna	21,118	2,000,000	20	10	15	20	25	30	35
Lahore	21,118	2,000,000	20	10	15	20	25	30	35
Muzaffargarh	21,118	2,000,000	20	10	15	20	25	30	35
Rajkot	21,118	2,000,000	20	10	15	20	25	30	35
Rawalpindi	21,118	2,000,000	20	10	15	20	25	30	35
Sargodha	21,118	2,000,000	20	10	15	20	25	30	35
Sialkot	21,118	2,000,000	20	10	15	20	25	30	35
Tarn Taran	21,118	2,000,000	20	10	15	20	25	30	35
Thanesar	21,118	2,000,000	20	10	15	20	25	30	35
Wazirpur	21,118	2,000,000	20	10	15	20	25	30	35
Yamuna	21,118	2,000,000	20	10	15	20	25	30	35
Zirka	21,118	2,000,000	20	10	15	20	25	30	35

has been continuous growth during the last fifty years due to the opening up of communications by railway and river steamers and to the

development of the tea industry which attracted labour from outside. The increase of the natural population was retarded by the earthquake of 1897 and the outbreak of *kala azar* in the decade 1891 to 1901, and though the growth of the indigenous population since that decade has been considerable the province owes its progress largely to the immigration of settlers from outside, and Mr Lloyd estimates that at least one-fourth of the whole increase of population before 1911 is due to this cause. The province is immune from any failure of the rainfall and, except for some damage by floods in the Suima Valley and some other districts chiefly between 1913 and 1916, the agricultural conditions were favourable. Assam, like the rest of India, felt the economic effects of the war in the general rise of prices in 1917, and in 1914-15 the fall of the cotton and jute markets affected the growers adversely. The tea industry, on which so much of the prosperity of the province depends, flourished till 1919, when the loss of the European markets caused a severe depression. Considerable areas were allowed to go out of cultivation and the number of labourers was reduced. The depression was however temporary and by the end of the decade the area under tea, which occupies nearly 6 per cent of the total cultivated area, had substantially increased and the tea garden population had risen from 700,000 to nearly a million. Public health apart from the influenza had been only fair. There was a recrudescence of *kala azar* during the decade, and though there was no plague outbreaks of cholera and dysentery occurred in various districts. The excess of births over deaths remained fairly high for the first four years of the decade, then followed a heavy fall for two years with a slight recovery in 1917. The influenza epidemic, though not so severe in Assam as in some other parts of India, is estimated to be responsible for 200,000 deaths or about 25 per mille of the population. The death-rate far exceeded the birth-rate both in 1918 and the subsequent year, when influenza lingered and the climatic conditions were generally unhealthy.

The growth of population varies considerably in the different natural divisions. In the Brahmaputra valley, which contains the bulk of the tea plantations and has large stretches of land waiting for cultivation, immigration of cultivators from Western Bengal and colonization by Nepalis and ex-garden sirdars has substantially increased. It is this part of the province which is best able to absorb the new population, and it is here that expansion has mostly taken place, rather less than half the increase of the decade being due in this tract to the effects of immigration. The Surma Valley, which already carries a much denser population, has actually lost by migration, while local calamities fell more frequently and heavily in this division lowering the health and vitality of the people. In the Hills the influenza epidemic levied a severe toll on the already sparse population and immigration accounts for about one-fifth of the growth of population.

16 Situated in the extreme north-west of the Indian Empire Baluchistan has Baluchistan

Province and Natural Division	Area.	Population	Density	Variation of population per cent.		
				1901 to 1911	1911 to 1921	1901 to 1921
Baluchistan	134 638	790 623	6	+3.0	-4.2	-1.4
Districts	54 223	420 648	8	+8.5	+1.5	+10.1
States	80 410	378,977	5	-1.9	-9.8	-11.6

an area of about 135,000 square miles and a population of about 800,000 persons. The administrative divisions comprise six districts including administered area and two states. The density and variations of the population are shown in the margin. The census of the Railway lines,

headquarter stations and small alien settlements was carried out on the standard schedule, while for the rest of the province a simplified tribal schedule was used which was specially adapted to local conditions. In area Baluchistan ranks fifth among the Provinces and States of India, but it has the lowest density of all and what population there is is very unequally distributed over the districts. Chagai has only one inhabitant to the square mile, while the only districts having densities markedly in excess of the very modest provincial average are Quetta-Pishin, with 26 persons to the square mile, Sibi administered area with 21 and Loralai with 11. Fertile soil in the valleys, a snow-fall on the surrounding hills which feeds the *karez* or well-systems, a fair rainfall, special facilities for irrigation, good communications by road and rail the presence of a large military garrison

and a market for surplus products are factors which combine to induce a certain number of persons to settle in the rather inhospitable looking country round Quetta the capital of the province. The Loralai district boasts a rainfall of 12·78 inches which is the highest in the province but its density is only half that of the Sibi district, where irrigation from the Sind canals renders cultivable about one-sixth of the land in the Nasrabad tahsil.

The actual decline in the population of the province disclosed at the present census is 35 078 persons or 4·2 per cent. The decrease of 0·8 in the States over balances a small rise of 1·5 in the British districts. It is not worth while attempting any detailed examination of the district variations, as much of the district population is of a fluid character continually moving not only across the provincial frontier but also to and fro from one district to another. The first seven years of the decade were years of average prosperity but the end of the decade saw the influenza epidemic of 1918 and culminated in the famine conditions of 1920-21. The census divides the people of Baluchistan into three classes, indigenous, semi-

	1911	1921	Actual Increase	Percentage Variation
Districts	13	10,238	— 328	— 3
Indigenous	876,797	733,473	— 143,324	— 16·3
Semi-Indigenous	25,778	27,130	+ 1,352	+ 5·2
British	62,978	72,474	+ 9,496	+ 15·1
States	38,987	37,670	— 1,317	— 3·4
Indigenous	4,136	377,236	— 373,100	— 90·1
Semi-Indigenous	1,136	691	— 445	— 39
British	234	— 377	— 611	— 261

indigenous and aliens and the marginal figures show that it is the indigenous people on whom the greatest loss has fallen. The recorded deaths from influenza in the province were 62,000 or 7·5 of the population but the actual death roll must have greatly exceeded this

number as outside Quetta town there is no regular system of registration. The mortality appears to have been fairly evenly distributed over the whole area. The chief effect of famine in Baluchistan is to increase the amount of migration and from Kalat and Las Bela States, which show decreases of 8·6 and 17·3 per cent as many as 11 000 and 4,316 emigrants respectively were enumerated in Sind alone, which is the chief refuge of the inhabitants in bad times.

In order to gain some idea of the growth of the indigenous population an inquiry similar to that in the last census regarding the number of children born and the number still surviving was instituted. The result which is of some interest is given by Major Fowle as follows —

"The result in brief was that out of 40,397 births there were 13 606 survivors and 7 691 deaths, which gives a general survival rate of two-thirds. This is very much the same as in 1911 when Mr Bray summed up the situation as follows — This then is the conclusion of the whole matter — though a man of Baluchistan can reasonably hope to beget a goodly family of 5 or 6 children, he cannot look to see more than three or four survive. And this is surely a very meagre surplus margin to carry on to the next generation, seeing that it has to replace the man and his wife or wives, sterile unions and deaths before maturity. So meagre is it that to say that the tribal population is standing still, is possible to overstep the mark. The situation would appear to be unchanged to-day. Excluding fortuitous disasters such as pestilence and famine the indigenous population would appear to be stationary.

17 The reconstitution of the Province of Bengal, made as the result of the separation of Bihar and Orissa and the resumption of the eastern Bengal districts, took effect from the 1st of April, 1912. Although no separate volume was issued for the Province of Bihar and Orissa at the Census of 1911 the statistics of the new province were separated and full effect was given in the tables of that census to the territorial rearrangement in Bengal and Assam. On the present occasion the Province of Bihar and Orissa formed a separate census unit under a Superintendent of its own, and the Bengal Census Report (with its tables) deals with the Bengal Presidency as it now exists for administrative purposes, there having been no change in its constitution since 1911 and includes some account of the figures of the Sikkim State. The province is, in respect of its

Province and Sub-division	Area	Popul. 1911	Popul. 1921	Variation of population per unit				
				1911-12	1921-22	1922-23	1923-24	1924-25
Bengal	47,442	11,192,000	12,192,000	100,000	100,000	100,000	100,000	100,000
West Bengal	17,442	4,192,000	4,192,000	100,000	100,000	100,000	100,000	100,000
North Bengal	17,442	4,192,000	4,192,000	100,000	100,000	100,000	100,000	100,000
East Bengal	17,442	4,192,000	4,192,000	100,000	100,000	100,000	100,000	100,000

geographical and geological features as well as of the character of its people more homogeneous than any other of the great provin-

ces of India. The four natural divisions into which it has been divided for statistical purposes coincide with the main administrative divisions, Western Bengal with the Burdwan division, Central Bengal with the Presidency division, Northern Bengal with the Rajshahi division to which is added the Cooch Behar State, while Eastern Bengal includes the Dacca and Chittagong divisions and the Tripura State. It was only in Sikkim and in a few of the more hilly and difficult tracts on the borders of the province that the synchronous census was not possible. In other tracts the organization was carried out under the standard rules. Of the general accuracy of the census Mr. Thompson writes as follows —

“The census of a stay-at-home rural population through the agency of local people under the careful supervision which was exercised over them, is an operation which, even in a country where education is not far advanced, may be one of great accuracy. The urban population is no more than 6½ per cent of the whole, and a large proportion of it lives in towns in which conditions approximate closely to those of rural areas. It may be considered very unlikely that the census total is out by as much as one per mille and it is probable that it is very much more accurate.”

If the sparsely inhabited hill districts of Darjeeling, the Chittagong Hill Tracts and the Tripura State are excluded the average density in the rest of the province is 640 persons per square mile, but even in the plains the inequalities of distribution are striking. Excluding Calcutta and Howrah, where the population is largely urban, the district density ranges between 34 in the Chittagong Hill Tracts and 1,148 in Dacca. While, speaking generally, the density increases from west to east and from north to south there are scattered throughout the province tracts of high and tracts of comparatively low density. There is evidence that in early times the population of Bengal was distributed in a manner very different from to-day, the important factors of that time being the security and protection obtained by the tenants of large estates who were settled round their powerful landlord. But with the establishment of law and order political factors gave way to climatic and agricultural considerations, and by 1899 the population had spread over the whole face of the country much as it is to-day. In a belt of districts running throughout the breadth of the province the recent record-of-rights survey has provided fairly trustworthy agricultural statistics. Analysing the figures of area and outturn in these districts Mr. Thompson shows how, owing to the productive capacity of the soil, it has been possible not only that the dense population of Eastern Bengal (rising in more than one-fifth of the area to over 1,050 per square mile) should support itself at a fair standard of comfort, but that there should still be room in such districts as Mymensingh, Bakarganj, Tippera, as well as in Jessore in the Central division, for considerable further expansion without lowering the standard of life.

On the other hand the prevalence of malaria in the western and central portions of Bengal has imposed upon the tracts a constant high level of mortality, which tends continually to approach the average level of the birth-rate, giving a permanently small margin for reproductive growth.

“malaria has long been the special scourge of the province. It is not only responsible for a heavy mortality, but it saps the vitality of the survivors and reduces the birth-rate. Except in the neighbourhood of Calcutta, where industrial development is the chief factor, the growth of the population is determined mainly by the varying prevalence of malarial affections.”*

The decade of 1871 to 1881 saw the outbreak of the Burdwan fever epidemic, while in the east of the province a disastrous cyclone and waterwave, which swept over the coastal tracts and was followed by a virulent outbreak of cholera, retarded the growth of the population. The subsequent thirty years, from 1881 to 1911, were a period of steady progress, and variations in the district populations seem to have taken much the same course in the second and third as in the first of these three decades. The population of Bengal increased between 1911 and 1921 by 1,287,292 persons or 2.8 per cent but this increase was by no means spread evenly over the province. The population of Western and Central Bengal has seriously declined except in the immediate neighbourhood of Calcutta, that of Northern Bengal has increased by 2 per cent while that of Eastern Bengal has increased by 8 per cent. Broadly speaking the

* *India Census Report, 1911, para. 100.*

six districts on the west of the province have lost most heavily the decrease in the Bankura and Birbhum districts amounting to 10·4 and 9·4 per cent respectively. On the opposite side of the province the districts of Eastern Bengal show the largest rate of increase the rise in Noakhali being as high as 13 per cent. Between

	Average annual rate per mille.	
	Period 1911-191	Period 1916-1925
Birth-rate	32·9	30·1
Death-rate	29·1	32·6
Difference	+4·8	-2·5

these groups lies a belt in which the population has been more or less stationary or the movement not so marked. Though the influenza epidemic was not so violent in Bengal as in some other provinces it is credited with a mortality of nearly 600 000 persons, its severity varying in different parts of the province. Its effect can be gauged by the comparative figures in the marginal table.

But even apart from the influenza, the decade was, at any rate so far as the rural areas of the Western and Southern divisions are concerned, less favourable to the growth of the population than that of 1901 to 1911. Malaria was specially severe throughout the period, which was characterised by a low birth-rate and a mortality which in several districts steadily exceeded the number of births. The Bankura district suffered twice in the decade from a failure of crops and the natural unhealthiness of the Burdwan and Birbhum districts was enhanced by serious floods, while the Nadia and Murshidabad districts of the Central division have a distressing history of disease. In all these districts the influenza epidemic, following as it almost universally did the incidence of malarial mortality took a heavy toll. The average rate of decrease in the agricultural tracts throughout these two divisions was considerably higher than is represented by the rate given for the divisions as a whole, comprising also as they do the industrial areas in the south, which have expanded under the influence of economic and commercial prosperity. In the Northern division the increase in the Darjeeling and Jalpaiguri districts is almost entirely due to labour immigration in connection with the tea industry. In both districts the influenza epidemic was severe in the hilly portions and the deaths in the decade exceeded the births. The Rangpur and Bogra districts are specially healthy malaria being less virulent, while the large proportion of Muhammadans, with their greater fertility accounts in part for the increase in the case of the latter district. In contrast with the conditions over the western and central portions of the province the population of the fertile and stable tracts of Eastern Bengal shows little sign of having reached equilibrium. The average increase of 8·3 per cent in this division includes rates as high as 13·0 in Noakhali 12·6 in the Chittagong Hill Tracts and 9·7 in Tippera. An interesting enquiry into the economic condition of these districts, based on figures of crop area and outturn suggests that, densely populated as they already are with a population averaging 800 per square mile and rising in parts well over 1,200 there is still room for further expansion, even to the extent of about 50 per cent in the Bakarganj and Mymensingh districts. The rate of increase in this tract is lower than in the previous decade, but the influenza epidemic was severe in Dacca and some others of the eastern districts, though it never caused an excess mortality equal to that in the other divisions. A fertile population in which the Muhammadan element prevails, a healthy climate and stable economic conditions have secured to this tract a steady increase of population amounting since 1870 to over 72 per cent. of the population of that year.

Other and Orissa.

18 The Province of Bihar and Orissa was separated from the Bengal Presidency and constituted in its present form on the 1st April 1912. In the Census of 1911 the Imperial Tables for the province were embodied in a separate volume while the discussion of the figures was included with those of the Bengal Presidency in one volume. The present census was carried out on lines very similar to those of 1911. The enumeration fell at a time of much political excitement in the province. The non-co-operation movement had created an atmosphere in which it was difficult to make headway with the preliminary arrangements and even after the appointment of supervisors and enumerators had been made the district census officers had an arduous task in maintaining the interest of the staff in their duties and keeping the work up to date. At the same time there was

little or no active and direct obstruction of the census organization either on the part of the public or of the census staff, though in the city of Patna the indifference was of such a persistent nature as eventually to compel the authorities to transfer the chief responsibility to the hands of the police, an eleventh hour change which did not tend to efficiency. On the whole Mr Tallents considers that the enumeration, if not better, was at least no worse than on previous occasions. The population enumerated was probably even more "normal," in the sense that it represented the ordinary resident population, than at previous censuses. Plague caused very little displacement except in one small town and, though there was the usual cold weather emigration of labourers to the harvests of Bengal and a somewhat large influx of labourers from Chhattisgarh (Central Provinces) owing to local scarcity, disturbance of population was probably even less in the census year than in other years. An interesting enquiry which was made in 46 villages showed that less than one in four males and less than one in ten females of these rural tracts had visited any of such important and attractive centres as Patna (the capital of the province), Calcutta, Gaya or Puri, while a scrutiny of the statistics of railway tickets further illustrates the immobility of the people, the proportion of the population which travelled by rail during the year varying from one in eleven persons in South Bihar to one in thirty-one in the Chota Nagpur Plateau. Among the provinces of India that of Bihar and Orissa stands fourth in area and population, Burma, Madras and Bombay exceeding it in area and Madras, Bengal and the United Provinces in population. The province supplies a population slightly larger than that of England and Wales on an area nearly twice as large, the mean density per square mile being 340 and varying between 109 in the Angul district of Chota Nagpur and 907 in the Muzaffarpur district of North Bihar. The whole area divides itself geographically and ethnically into three main divisions, Bihar (further divided for the purpose of statistics into North and South Bihar), the Chota Nagpur Plateau, sparsely inhabited by backward and primitive peoples, and the coastal districts of Orissa. The figures show an increase in the total population since 1872 of 34·6 per cent. Some part of the large increase in the early decade of 1872-1881 is undoubtedly

due to increasing accuracy of enumeration, especially in the Chota Nagpur Plateau, but the steady growth of population in Orissa since the

Province and Natural Division	Area	Population	Density	Variation of population per cent.					
				1872 to 1881	1881 to 1901	1891 to 1901	1901 to 1911	1911 to 1921	1872 to 1921
Bihar & Orissa	111 809	37 801 858	340	+18·4	+7·5	+1·8	+5·1	-1·2	+34·6
North Bihar	121 822	14 097 046	112	+14·0	+5·9	+1	+1·9	-7	+22·4
South Bihar	15 070	7 574 003	502	+10·9	+2·7	-3·6	+7	-2·5	+7·7
Orissa	8 231	3 060 833	480	+17·7	+3·8	+7·1	+0	-4·6	+20·2
Chota Nagpur Plateau	66 690	12,353 370	186	+34·1	-14·3	+6·4	+14·0	+1	+56·2

famine of 1866 is probably real. Expansion had been retarded in the period

	Average annual rate per mille	
	Period 1911 to 1917	Period 1918 to 1920
Birth rate	41·2	33·4
Death rate	32·0	42·5
Difference	+9·2	-9·1

1881 to 1911 by plague and famine, by the outbreak of Burdwan fever in South Bihar and by floods and disease in Orissa. The vital statistics in the margin give some indication of the advance in the earlier years of the last decade till 1917. The first year of the decade (1911) was an unhealthy one. Plague, cholera and fever sent the recorded death-rate up to 35 per mille of the population, but in spite of a virulent outbreak of plague in Bihar in 1914 and some distress from a partial failure of the crops the next five years were distinctly prosperous, the crops on the whole were fair and the general health of the people normal. In 1917 good rainfall gave bumper crops but the year was unhealthy and the death-rate rose. Basing his calculation on the increase since 1901 and the fact that the first seven years of the decade were years of high birth rate and low death-rate Mr Tallents estimates that had a census been taken on March 1918, the recorded population would have been not far off 39½ millions or 1½ million more than the population enumerated in 1921.

"The first sign of trouble in 1918 was an acute outbreak of cholera in the hot weather in that year over 200,000 deaths occurred from this disease. In July the influenza was first noticed in the headquarters stations of the districts in a not particularly acute form. Then

after a lull of a few weeks it began in September to spread rapidly along the routes of communication. It was frequently combined with an attack of pneumonia, and this in the majority of cases proved fatal. Before the end of this year 1·2 per mille of the population or over half a million of persons had perished from the disease in the British districts alone. Greater havoc was wrought in the rural than in the urban areas—the death-rate from fever in 1918, when influenza was the most important item under this head, was 40·6 per mille in the former and 23·6 in the latter. The districts which suffered most were Gaya, Shahabad, Palamau, Ranchi and Hazaribagh. Those which suffered least were the coastal districts of Orissa, Purnea and the Santal Parganas, in which the outbreak had been most acute in October, earlier than elsewhere—it is probable that the warmer and damper air of October was more favourable to recovery from pneumonia than the winter months. The disease spread to the most remote villages and quickly reduced many of them to a state of complete disorganization. As a rule whole villages were attacked at a time so that it was impossible to make arrangements for nursing the living or even for burying the dead, and the medical staff at the dispensaries and hospitals whose work brought them into close contact with the disease were themselves attacked in many cases so that they too were unable to give much assistance. The disease wrought great havoc amongst the aborigines. When first attacked many of them especially the Santals, would sit in the sun with practically no covering on them, when they began to feel worse and to think that their life was likely to be short, they decided that it should at least be gay and took good drink of liquor and hearty meal of goat flesh. This treatment is the exact antithesis of that generally recommended, so it was inevitable that a great many cases amongst the aborigines should develop into pneumonia and end fatally. It was reported that the influenza was more fatal to the poor than to the well-to-do and the reason for the difference was probably that the well-to-do could take to their beds and stay there quietly with some one to look after them. The same cause probably accounts for the fact that towns fared better than villages, for there are more people in towns to give assistance and a sick man is less dependent on his own resources. There is no evidence that the disease originated in malnutrition though it is likely that malnutrition was an important factor in determining the issue. It is estimated that from 50 to 80 per cent of the population of India were attacked. Bihar and Orissa lay between the province which suffered most, the Central Provinces, and that which suffered least, Bengal, and in comparison with other provinces it escaped relatively lightly. Nevertheless no other epidemic has left so deep a mark on the population of the province and references to it will be constant in the pages that follow.

The conditions were aggravated by a serious failure of the rains, with the result that the crops were universally poor and with a general rise in the prices of all necessities distress was acute and universal. Famine organization had to be put in force while temporary emigration swelled to a flood, the number of persons recruited for the Assam tea gardens rising from 11,246 in 1917-18 to 196,336 in 1918-19. Though the monsoon of 1919 was abundant and the crops good the birth rate still remained low but in spite of a badly distributed rainfall in 1920 the year was comparatively healthy. Apart from the specially adverse conditions of the decade it seems probable that the point of maximum population has been reached in a large portion of North Bihar the density of population in Muzaffarpur and Darbhanga being already as high as 807 and 870 persons per square mile and the pressure on the cultivated area considerable. In South Bihar influenza has been the dominant factor of the past decade but in any case the expansion of population there depends largely on the utilization of irrigation facilities and the development of the industrial areas. The density in Orissa rises to over 1,000 persons per square mile in some of the more fertile regions. The tract suffered more from the failure of crops in 1918 than from the epidemic and it was only an extension of emigration, which pressure on resources had already started, that saved the tract from a worse calamity. Unlike the conditions in North and South Bihar and in Orissa circumstances seem in favour of the expansion of the population in the Chota Nagpur Plateau and the Orissa States. The area is inhabited by aboriginal races of great fertility while the prospects of industrial development of coal, iron and other minerals is practically unlimited and there are large areas still available for agricultural expansion.

Bombay Presidency

19 There have been no considerable changes in the area of the Bombay Presidency since 1911. Excluding the Alien Settlement the area is now 180,904 square miles, of which 123,541 square miles are occupied by the British districts and 63,433 by States and Agencies. In point of size Bombay comes second among the provinces of India though other provinces have a larger population. The Presidency forms in certain respects an unsatisfactory census unit since (a) it includes the sub-province of Sind, which is not only separated from the rest of the Presidency by

distance but is distinct in every condition, climatic, racial, linguistic and sentimental and (b) the interspersing of territory belonging to the Baroda State with British territory to some extent vitiates the value of the statistics, so that for a full appreciation of the conditions of Gujarat it is necessary to consult the figures both of the Bombay and Baroda reports. The Bombay Presidency was divided in 1911 into five natural divisions for the purposes of presenting the statistics, *viz*, Sind, Gujarat, the Konkan, the Deccan, and the Karnatak, and these divisions have been retained on the present occasion. The Aden Settlement still lies for certain administrative purposes within the jurisdiction of the Bombay Government and in some of the Imperial Tables its figures are shown under Bombay. The population of the Settlement varies with the military garrison. At the present census there were 56,500 inhabitants, an increase of 22.4 per cent. over the figures of last census. The movements of population in the Presidency and its natural divisions are shown in the following statement —

Province and Natural Division	Area	Population	Density	Variation of population per cent					
				1872 to 1881	1881 to 1891	1891 to 1901	1901 to 1911	1911 to 1921	1872 to 1921
Bombay	186 904	26 701 148	143	+1	+15	—0	+0	—1	+16
Bombay City	24	1 175 914	49 090	+20	+6	—6	+20	+20	+82
Gujarat	10 145	2 958 849	292	+2	+8	—13	+4	+6	+5
Konkan	13 680	3 031 669	222	+4	+10	+2	+2	—3	+11
Deccan	38 262	6 000 114	158	+1	+17	—4	+8	—5	+15
Karnatak	14 024	2 788 796	187	—13	+20	—1		—2	+1
Sind	46 506	3 270 377	71	+10	+19	+12	+9	—7	+49
States	63 453	7 409 429	117	+2	+16	—14	+7	+8	+9

The Superintendent of Census Operations writes —

“The course of the changes in this Presidency is directly attributable to obvious and known causes. Between the years 1872 and 1881 came the famine of 1877, one of the worst ever known, but confined to South India. As a result the population at the 1881 Census fell sharply in the Karnatak districts and states and the adjacent eastern districts of the Deccan, this fall counterbalancing a rise in other regions. Between 1881 and 1891 was a decade of marked prosperity, with absence of famine or epidemics. Consequently at the 1891 Census every district and every state showed a marked rise. Between 1891 and 1901 came the first assaults of plague and the great famine of 1899-1901 which affected mainly Gujarat, Khandesh, the north-east Deccan and the south-east of Sind. Consequently every district and state in Gujarat showed a marked fall due to famine and some of the Deccan and Karnatak districts a fall due to plague. Between 1901 and 1911 was a period of prosperity on the whole without any marked famines (moreover by this time famine had ceased to cause direct loss of life by starvation), but with a continuance of plague varying in its severity region by region. As a result there was a rise in most districts, modified by local falls in others, attributable almost with certainty to plague.”

The figures of 1921 show a fair increase in Gujarat and the northern districts of the Deccan. On the other hand there is a considerable drop in the population of Sind, the Konkan and the larger part of the Deccan with a slighter decline in the Karnatak. The first part of the last decade was generally favourable to a growth of population in Bombay. The years 1914-15 and 1915-16 were so good that any effect on population of previous unsatisfactory agricultural conditions in parts of the Presidency, *e.g.*, Gujarat, Ahmednagar and Sholapur, was probably eliminated by 1917. Mr Sedgwick thinks that, apart from the decimating influence of the influenza epidemic, there is a slight but distinctly observable general correlation between the character of the season and the local population changes throughout the Presidency, whether the agricultural conditions of the whole decade are taken or those of the last four years only. Plague was specially virulent in the first year of the decade and in the years 1916, 1917 and 1918, but the total number of deaths from the epidemic in the decade was only about half the number of the previous decennium. The factor of influenza, qualified by special circumstances in different districts, has determined the results of the census in Bombay. The epidemic seems to have avoided the coastal tracts, a feature which is noticeable throughout the seaboard of India. It took a heavy toll in Sind,

the Deccan and the Karnatak, the mortality being most severe in the eastern districts of the Deccan and Karnatak and in the Thar and Parkar district of Sind. Mr Sedgwick has dealt fully with the effect of the epidemic in various parts of the Presidency and estimates, on the basis of the vital statistics, the total mortality in the British districts, excluding Bombay City from influenza at one million persons. Using the estimated number of influenza deaths in each district he has attempted to give some idea as to the probable progress of the population in each tract after eliminating the influenza factor. The reconstructed figures show the progressive character of Gujarat Khandesh and the inland Karnatak and the fact that Kanara is declining fast and North Konkan slowly the percentages of reductions being Kanara 3·7 Ratnagiri 0 and Kolaba 0·7. The reasons for the decay in certain tracts of the Karnatak and Konkan have been specially dealt with in an appendix to the Bombay Report. In the Konkan emigration is the chief cause. Migration has also adversely affected the population of the Ahmednagar district which suffered severely from scarcity in the years 1918-19 and 1920-21 while the large decreases in the northern districts of Sind are also partly due to the decline in the number of immigrant Baluchis and Punjabis as compared with 1911 owing to the adverse season preceding the census and perhaps also to political unrest. On the other hand migration, chiefly from east to west counts for the large increases in the Khandesh districts and the Panchmahals, where a series of good seasons have enabled the tracts to recover from the effects of the 1900 famine. A feature of the decade is the large influx of population into the cities of the Presidency an influx closely connected with the development of industries of all kinds. The matter is dealt with in greater detail elsewhere but it is noteworthy that with the exception of Surat where the rise in population is slight, all the cities show substantial increases. Sholapur has almost doubled its population Karachi has an increase of over 40 per cent. Bombay city of 90 per cent the Bombay suburban area 50 per cent and Ahmedabad of 17 per cent. All these cities are large centres of industrial life.

The number of persons per square mile in the Bombay Presidency (including the States) is 143 the British districts having a density of 156. The former figures are about half way between those of the Punjab (183) and of Madras (104). Apart from the cities the population lies most thickly in the Gujarat division, where the Kaira district has a density of 445 persons per square mile. The Karnatak has a population of 187 persons per square mile and the Deccan 158. The figure (223) of the Dharwar district which is the most thickly inhabited district in the former division is however exceeded by that of East Khandesh (236) in the Deccan. In Sind the bulk of the population lies in the irrigated tract along the Indus, the density varying between 150 persons per square mile in the Hyderabad district to 20 persons in the sparsely inhabited district of Thar and Parkar. Figures of density based on cultivable area are given in an appendix to the Bombay report. The highest density is found in the coastal districts of the Konkan where owing to the large extent of forest, the difference between the density based on the total area and that based on the cultivable area is also most marked. Mr Sedgwick is, however, doubtful whether any valid inferences can be made from these figures as to the pressure of population on the wealth producing capabilities of the land, owing to the impossibility of arriving at a satisfactory definition of cultivable area, to the intrusion of so many disturbing factors, such as the profit from the cattle industry and grazing areas, and to the difficulty of isolating those tracts which are entirely dependent on agriculture for the production of wealth.

70 The population of the Province of Burma as found at the Census of 1921 was 13 12 10⁶ persons and the area 233 707 square miles. Large tracts of the province consist of mountainous and woodland country where communications are difficult and habitation sparse. Over such area a census according to the regular method is not yet possible and in the case of rather over 1½ million persons the enumeration was carried out without a final check while in still more difficult areas containing as many as over 40 000 persons, the census was confined to an estimate of the population. In all these cases special arrangements were made on the borders of the areas differently treated so as to preclude the likelihood of double enumeration. In the province generally the enumeration was

carried through without any special difficulties and the Provincial Superintendent is of opinion that the results are correct within a very near approximation. For the purposes of exhibiting the figures Mr. Grantham has divided the province into four main natural divisions, namely, the Burman, Chin, Salween and Shan divisions. The Burman division, which is by far the largest, is again sub-divided into Delta, Coast, Centre and North. These main divisions have a definite and distinctive physical and ethnic character. The Burman division consists of the basins of the Irrawaddy and the Sittang rivers and the coastal strips of Arakan and Tenasserim. The characteristic areas of the division are the swampy rice-fields in the Irrawaddy Delta and the rolling uplands and irrigated plains of the central portion. The Chin division is of smaller area and sparsely populated and stretches westwards across the watershed to include part of the nexus of the hills which extend down from the eastern end of the Himalayan system. The Shan division occupies part of a great plateau connected with the Himalayan system which extends across into China. The Salween division is a small part of the basin of the Salween river including an extension of this plateau. In all the divisions the indigenous races largely predominate but, except for some Chinese in the Shan division, the Burman division contains the majority of the foreigners, Europeans, Indians and Indo-Burman races. The Chin division consists almost solely of the Chins and the Shan division of the Shan races. The Salween division is, primarily, a Karen country, although the majority of the Karens are found in the Burman division. The Delta division comes first in economic importance and contains the bulk of the Indian immigrant population, but the Central division, which includes one-fifth of the area and one-third of the total population of the province, is the proper home of the Burmese, no less than 95 per cent of its population belonging to the Burmese race proper.

The main statistics of the area and population of the various divisions are given in the marginal table below. The population is not evenly spread over the province, the greater part of it being concentrated in two large patches

Province and Natural Division	Area	Population	Density	VARIATION OF POPULATION PER CENT					
				1872 to 1881	1881 to 1891	1891 to 1901	1901 to 1911	1911 to 1921	1891 to 1921 *
Burma	233 707	13,212 192	57	+30	+23	+20	+15	+9	+49
Burman	157,848	11 504 029	73	—	—	+11	+15	+9	—
Delta	35 195	4 820 745	137	+48	+28	+28	+18	+11	+64
Coast	35 463	1 598 493	45	+24	+18	+17	+15	+12	+64
Centre	44 482	4 405 770	98	—	—	+9	+13	+7	+31
North	42 708	679 021	16	—	—	—	+17	+6	—
Chin	12 600	159 702	13	—	—	—	+31	—	—
Salween	6 946	114 220	16	—	—	—	—	+4	—
Shan	56 313	1 433 542	25	—	—	—	+15	+4	—

* Figures of 1872 and 1881 are comparable with each other but not with those of 1891 and subsequent years.

which may be associated with Rangoon and Mandalay and have populations of about 3.5 millions each, and two small patches belonging to the two portions of the coast sub-division, together containing about 1/8th of the population, which may be associated with parts of Moulmein and Akyab. These four dense patches, two large and two small, occupy altogether about one-third of the area of the province and include two-thirds of the population. The first regular census of Burma was taken in 1872 and was confined to an area of about 76,000 square miles then known as British Burma. The Census of 1881 nine years later covered the same area, but in 1891 the area of the census was doubled by adding parts of Upper Burma and of the Chin States. In 1901 further additions were made with the result that the census covered areas three times as great as that of 1872. The Census of 1911 covered all the administered area of the province except a small tract in the extreme north of the Chin States. In the recent census still further tracts were included, the most important of which are in the Myitkyna and Putao districts of Northern Burma. The outstanding feature of the figures is the reduction of the rate of increase in the population from 15 per cent in the decade 1901-1911 to 9 per cent in the recent decade. This reduction took place in every natural division and in the Chin, Salween and Shan divisions it was even larger than in the Burman division which, on account of its predominant population, determines the rate for the whole of the province. Excluding areas containing a population rather less than 4 per cent of the whole, which owing to their primitive character or for various reasons connected with the census procedure are best left

out of comparison, the increases in the decades 1901-1911 and 1911-1921 amount to 14.4 and 8 per cent. respectively for the enumerated population and 14 and 8.1 per cent. respectively for the natural population. Had the same rate of increase been maintained in the last decade as in the one preceding it the population would have been greater by 663 000 persons than the population actually enumerated. It is not possible to arrive at the exact number of persons gained by the province in the balance of migration but in any case the immigrants consist entirely

Division	Population of 1921	Increase since 1911	Increase per cent.	
			1901-11	1911-21
All India (non-Buddhist)	13 706 724	216 782	7	13
Burma (non-Buddhist)	135 571	41 946	14	29

of Indian and other foreign races and as the indigenous peoples of Burma rarely migrate difficulties of migration figures can be avoided by confining the consideration of the variations in the population to the figures of the indigenous or

Buddhist races. The marginal table gives the population and variation in the comparable area of the Buddhist and non-Buddhist peoples respectively. The increase in the figures of the latter are partly due to migration and partly to natural reproduction in the foreign population. Unfortunately owing to their untrustworthy nature the vital statistics records are useless for the purpose of estimating population. The outstanding event affecting the growth of population in the last decade was, however, the influenza epidemic, which began to appear in Burma about the middle of 1918 in a mild form and thereafter spread through the province. The vital statistics records show a total of 178 500 deaths from the epidemic, but many deaths from influenza were not recorded owing to the breakdown of the registration staff and the Provincial Superintendent puts the total death rate in the registration area at 250 000 persons and considers that in the whole area the reduction of population through the epidemic may be placed at 2.85 per cent. of the 1911 population. Apart from the influenza there was nothing in the course of the decade which was likely to lower the previous rate of increase of the population. The agricultural records of the last two decades have been very similar. There were floods, droughts or capricious rains in some places at some times in every year of each decade. But while some of these troubles were serious enough in their own localities they never rose to the magnitude of widespread calamities, and it does not appear that the economic stringency of the last half of the decade has seriously affected the growth of the population either through the birth-rate or through the death rate. While admitting the influence of other possible local factors, Mr. Grantham thinks that the decline in the rate of increase not ascribable to influenza is mainly due to a paucity of parents and, going back to the Census of 1901 he points out that in the last 30 years the age statistics show a decline in the proportion of women in the early adult categories of life which must necessarily result in a progressive decline in the birth rate. The fall in the rate of increase is noticeable in the north and west of the province and in the Southern Shan States it would seem that either specially low fertility or a high infant death-rate are responsible for the actual decrease in population in the last decade. In the Central division, where the rate of increase is now also comparatively low there has been some migration from congested areas, e.g. in the Promo district, while specially unhealthy conditions are responsible for stagnation in Kyaukse. The variations in density are considerable over the province and economic pressure of population on the means of existence is at present confined to very restricted areas and usually relieved by migration. Influenza is known to have affected very seriously the foreign population of the Delta division, which consists mostly of Indians many of whom live under unhealthy domestic and economic conditions. But in spite of the death rate the Indian population has increased in this decade by 19 per cent. and now forms 67 per mille of the population of the province the number of foreign born Indians being 573 000 as compared with 404 000 in 1911. The whole Indian population in Burma now numbers 89 000 persons.

¹ The Central Provinces and Berar have an area of 131 032 square miles and contain nearly sixteen million persons. In area the provinces come sixth among the provinces of India and in population seventh among European countries. Roumania has rather a smaller area and a somewhat larger

population Of the total area about a quarter is occupied by Feudatory States which together have a population of slightly over two million persons. A considerable portion of the southern and eastern tracts of the provinces consists of backward and undeveloped country sparsely inhabited by primitive races. In this and other smaller areas, forming together about a quarter of the total area of the provinces, it was impossible to hold a final revision of the census schedules and the figures of the preliminary enumeration were used. The population of these tracts, however, is practically stationary and, for statistical purposes, the difference between the resident population and the *de facto* population of a particular day is negligible. Over the rest of the province the employment of the trained Land Record staff for census purposes secured a high standard of accuracy for the enumeration. The distribution of the population was not, as was the case in 1911, temporarily disturbed by the prevalence of plague at the time of census, and though in the north of the provinces there was some flow of labour from outside for the wheat harvests, while the scarcity of 1920 had induced a temporary exodus of labour from the Chhattisgarh division to the industrial areas of Bihar and Orissa, Mr Roughton considers that the numbers and distribution were, on the whole, normal and that the census enumeration of 1921 compares not unfavourably in accuracy with that of other countries.

The main statistics of the distribution and growth of the population in the

Province and Natural Division	Area	Population	Density	Variation of population per cent						The province are given in the margin. The province divides itself roughly into five natural divisions. The wheat tracts of the Nerbudda Valley on the
				1872 1881	1881 1891	1891 1901	1901 1911	1911 1921	1872 1921	
O P & Berar	131 052	15 979 660	122	+22.5	+10.7	-7.0	+17.9	-3	+46.9	
Nerbudda Valley	20,751	2,731 443	132	+14.0	+6.2	-10.4	+10.7	-2.8	+10.8	
Plateau	16 723	1 590 889	95	+20.6	+9.8	-7.2	+27.3	-6.9	+46.6	
Maratha Plain	40 527	6 221 544	154	+16.6	+8.1	-6.8	+13.9	+8	+35.1	
Chhattisgarh	41,461	4 731 810	114	+39.6	+17.1	-10.2	+23.3	+3.0	+86.6	
Plain										
Chota Nagpur	11 610	703 974	61	+42.4	+21.2	+9.9	+29.4	-6.7	+128.9	

north, the cotton tracts of Berar and of the western portion of the Nagpur division and the rice tracts of the Chhattisgarh plain are all fairly well populated, while the Plateau districts in the centre and the mountainous tracts of the Chota Nagpur States on the east consist of undulating forest-clad country sparsely inhabited for the most part by backward races. The average density of the whole province is 122 persons per square mile, but the density ranges from a maximum of 301 to the square mile in the Sakti State of Chhattisgarh to a minimum of 24 in the little state of Changbhakar in the Chota Nagpur division. The normal rainfall of the provinces is sufficient everywhere for agricultural operations and, apart from the configuration of the surface, historical considerations have had a considerable influence on the development of the population. Isolated from northern India by the range of hills which passes from east to west north of the Nerbudda Valley, Gondwana, as the country used to be called, was cut off from the ordinary flow of agricultural colonization. Stable government has been comparatively recent and, till the overthrow of the Maratha Confederacy, the more open country of the Maratha plain and the Berars were subject to the raids of hordes of *pindaris*. With the establishment of a firm central government in the middle of the last century and the opening out of the country by communications the development of the naturally prolific people has been rapid. The growth in population since 1872, in spite of the prevalence in parts of the provinces of endemic malaria and the set backs of the famine period of 1897-1901, shows the high figure of 47 per cent. The broad stretches of rice country in the Wainganga Valley and the Chhattisgarh plain now carry a thick and growing population. In the Nerbudda Valley the population of the more developed districts has probably reached the limit which the cultivated area can carry at the present stage of agricultural progress, while in the Maratha plain the standard of wealth and of living has been rapidly rising owing to the recent development of the cotton industries.

Except for a partial failure of the crops in the north of the provinces in 1913-14 the agricultural conditions of the province up till 1917 were on the whole favourable, but even in this period the conditions of public health were not as

satisfactory as in previous years. The birth rate averaged lower there were serious local outbreaks of cholera while plague though it is probably gradually losing its hold still caused mortality in parts of the Provinces. The excessive rain of 1917 caused some damage to the cotton and jowar in the west and the early cessation of the monsoon was unfavourable to the wheat crop in the north. The abrupt cessation of the rains in September of the next year resulted in a failure of the *khari* crops over the whole of the provinces and in widespread scarcity and distress. The severity of the influenza epidemic which reached the provinces in September 1918 was intensified by the agriculture depression and by the high prices of the necessities of life which were the result of the economic conditions brought on by the war. The epidemic raged with terrible severity throughout the Provinces, though the disease was somewhat less severe in the eastern tracts and the total mortality in the British districts up to the end of November of that year is estimated at 91 000 persons, which amounts to nearly 6 per cent. of the population and is practically equal to the total mortality for the whole of the disastrous famine year of 1897. Even this estimate to which must be added an almost equal proportion of mortality in the states, is owing to the failure of the registration organization, undoubtedly lower than the actual figure must have been. The indirect effects of the disease were equally appalling. The birth rate which normally stands at about 30 per mille dropped to 13 in 1918 and to 34 in 1919 during which year the disease lingered on in decreasing intensity. It had not recovered in 1920 and there was a large excess of deaths over births in the last three years of the decade. The prosperous season of 1919 gave some relief though an outbreak of cholera caused high mortality in this year. The monsoon again failed in 1920. Famine or scarcity was declared over a considerable area in the provinces and agricultural conditions had not recovered when the census was taken. There was considerable temporary migration from the east of the provinces to the mining areas of Chota Nagpur but the Superintendent at that time that the bulk of the migrants had returned by the date of the census. Based on the vital statistics the excess of births over deaths in the first seven years of the decade averaged about 12 per mille per annum and the effect of the disastrous period of the last three years of the decade was to wipe out the whole of this increase. The heaviest loss in population occurred in the Plateau districts and the Chota Nagpur division, where the decrease is about 7 per cent. There is a slighter increase of 3 per cent. in the Chhattisgarh plain division and the net result is that the total population of the provinces has remained stationary since 1911.

The set back in the growth of the population due to the special conditions of the decade is particularly unfortunate since the general circumstances of the provinces favour a substantial and rapid development of its people. Except in one or two tracts of the Nerbudda Valley and possibly some tracts in the Chhattisgarh plain there is little pressure at present on the cultivated areas, while there are still considerable areas of uncultivated land which could under favourable conditions be brought under the plough. All that is required is capital and enterprise. The area under irrigation is expanding rapidly and there has been, during the last 20 years substantial progress in the development of communications both by road and rail. The industrial possibilities of the manganese coal and cotton areas are almost unlimited and the great wealth which exists in the forests has hardly yet been exploited. The races which inhabit the provinces are naturally fertile and in the more developed tracts the standard of living is rising. Except during the periods where abnormal conditions of scarcity or disease have restricted its growth the population has been steadily increasing and with normal prosperity the progress of growth, thus temporarily retarded should continue.

Notes

2. The area of the Presidency excluding Cochin and Travancore is 143 842 square miles of which 112 000 square miles are occupied by the British districts and 31 842 square miles by states. There has been no change in the boundaries of the Presidency since 1911 but during the decade the Agency tracts of Ganjam, Vizagapatnam and Colavara were separated from these districts and formed into a separate unit called the Agency division. At previous occasions the States

Sanitary Commissioner as a moderate estimate of the number of deaths from this disease in 1918 alone. The figures given in the marginal statement indicate the extent to which the various divisions

Natural Divisions.	Average death-rate by fever from 1912-17	Death-rate by fever in 1918.
Madras Presidency	7.4	21.4
Arenar	18.5	35.4
East Coast North	12.8	29.7
Deccan	9.7	30.6
East Coast Central	4.7	16.9
East Coast South	4.6	13.4
West Coast		15.9

of age sex and civil condition indicate that this tract suffered almost as seriously as the Deccan districts, the East Coast Central and the East Coast South coming next in order of infection. An analysis of the district figures shows that in sixteen districts of the Presidency the mortality from fever rose by 100 per cent. or over the visitation being specially severe in the Bellary and Anantapur districts of the Deccan division and in the Coimbatore and North Arcot districts of the East Coast Central division. In the Bellary district the actual excess of deaths from fever was about 55 000. The epidemic was more fatal to women than to men the number of female deaths per 1 000 male deaths from fever being in each of the sixteen districts worst affected considerably above the average. The great increase of deaths among persons at the prime of life naturally enhanced the effect of the epidemic on the birth-rate of the Presidency which fell from the normal of 32 to 28.9 in 1918 and 25.5 in 1919 while in individual districts the rate went even lower. There was in most cases a fair recovery in 1920. Migration is a factor of considerable importance in its effect on the variation of population in the Presidency. On the balance of migration the Madras Presidency lost more than one and a half million of her natural population, the figure representing a considerable excess over that of 1911 when the adverse balance was 1 155 000. The bulk of the permanent emigration is drawn from the Ganjam and Vizagapatnam districts and goes to Burma and Assam in India and to Ceylon and the Malay States.

North-West Frontier Province.

23 The North-West Frontier Province, which comprises five British districts and an extensive trans-border tribal tract, has an area of 38 918 square miles and a population of 5 076 476 persons. It has been divided into three natural divisions (1) the cis Indus district of Hazara (2) the trans-Indus districts of Peshawar Kohat Bannu and Dera Ismail Khan and (3) the trans-border tract consisting of five tribal areas and agencies. The table in the margin shows the variation in the population of the natural divisions in the last five censuses. The climate is marked by great extremes of temperature. The winters are

Partitions and natural divisions	Area	Popul. 1901	1911	Variation of population per cent.				
				1881	1891	1901	1911	1921
N. W. Frontier Province	38,918	5,076,476	36				+22.9	
Districts	17,119	2,281,548	36				+4.1	
Cis Indus District	2,301	2,121,548	36				+4.1	
Trans Indus District	42	2,281,548	36				+4.1	
Trans border Tract	21,500	2,854,928	36				+4.1	

cold while in summer the thermometer rises to 100° at Peshawar and to 120° at Dera Ismail Khan. The population of the five settled districts was enumerated on the general schedule but except in the British posts and military area there was no regular census of the tribal tract though the rough estimates of area and population which were made are probably fairly accurate. The higher density in the British districts is due to the larger proportion of cultivable area an organized system of irrigation and a settled form of government. In the districts the density varies from 318 in Peshawar to 75 in Dera Ismail Khan the average area of a district being 2,684 square mile and the population 450 000. Nowhere in the more settled parts of the province is there an real pressure of the population on the soil and there is still room for further expansion even in Peshawar and Charsadda the two most densely populated towns in the province.

The population has in the British districts increased from 2 196 923 in 1911 to 2 313 310 in 1921 the rate of increase having fallen from 6 per cent in the

previous decade to 2.5 in that ending in 1921. To the general advance in population Peshawar (4.9) and Hazara (3.2) have made the largest contribution. Dehra Ismail Khan has an increase of 1.8 per cent while in Kohat and Bannu the population has declined by 3.8 and 1.3 per cent respectively. The decade opened under healthy conditions with good and well distributed rains, the harvests being on the whole normal and agricultural conditions satisfactory. Public health was good in 1911-15, the annual rate of natural increase during this period ranging from 7 to 14 per thousand. In the year 1916 however malaria raged with unusual severity and was succeeded by a serious outbreak of influenza, which is estimated to have caused a mortality of 93,800 persons or more than 4 per cent of the enumerated population of the British districts and a very heavy indirect loss to the population owing to the fall in the birth-rate. Though the trans-border tract also suffered severely from influenza, the effects of which cannot be measured owing to the lack of vital statistics, the population of the tract shows the extraordinary

	Births	Deaths	Difference
1911-15	34.5	24.1	+10.4
1916-20	30.9	30.4	-5.5

increase of 74.2 per cent., which is due to the inclusion in the present estimate of a large number of tribes omitted at the last census, and also to the unusual massing of troops in the tribal territory owing to the disturbed conditions of the border. The statistics of migration show that, as compared with the decade ending in 1911, the gain of the province on the balance of emigrants and immigrants has declined, the lawless condition of the border during the decade probably being the principal reason for the fact that the number of traders and labourers is not as great as it used to be.

24. With the transfer of the Head-Quarters of the Government of India, from Calcutta to Delhi in 1911 the Delhi enclave, consisting of the tahsil of Delhi, containing Delhi City, together with a small portion of the Balabgarh tahsil of the old Delhi district, was separated from the Punjab for political and administrative purposes and constituted into a separate province under a Chief Commissioner from the 1st April 1912. Later on the Province of Delhi was enlarged by the addition of some 46 square miles of territory from the Meerut district of the United Provinces. The marginal statement below gives the area and population of the two provinces as thus reconstituted. The Punjab as a whole

Province and Natural Division	Area	Population	Density	Variation of population per cent				
				1881 to 1901	1901 to 1901	1901 to 1911	1911 to 1921	1881 to 1921
Punjab	130,905	25,101,060	183	+10.2	+0.3	-2.1	+5.5	+20.7
Indo-Gangetic Plain	30,290	11,440,710	291	+10.3	+5.6	-0.5	+6.8	+12.1
West Himalayan	22,080	1,737,801	79	+0.0	+3.2	+2.0	+2.2	+13.4
Sub-Himalayan	10,478	5,838,830	300	+9.0	-1.1	-5.3	+2.2	+12.4
North West Dry Area	50,081	0,077,074	108	+13.2	+22.4	+17.0	+0.4	+78.9
Indo-Gangetic Plain West-Delhi	503	488,188	823	+0.4	+8.8	+2.0	+18.1	+30.3

somewhat exceeds the British Isles in area, though its population amounts to hardly two-thirds of that of England and Wales. As in 1911 the British

territory is divided into five administrative divisions containing 29 districts. There has however been during the decade some reshuffling of districts between the administrative divisions, which are described in detail in the provincial report. A recent administrative change, effected since the census, places the principal Punjab states, with a population of just over four millions, in direct political relationship with the Government of India, leaving a number of small states, with a total population of only just over 400,000, under the political control of the Punjab Government.

The rainfall, which averages 28" over the whole province, varies from 58 inches in the Himalayan division, which contains the Simla and Chamba States and the Kangra Valley, to an average of 9" in the south-western portion of the plains country, where what was largely a bare expanse of desert is being gradually reclaimed to cultivation and inhabitation by canal irrigation. Between these extremes lie the Sub-Himalayan districts, with a rainfall of 31 inches, forming a strip of fairly level country below the Himalayas but broken by foot hills, and the Indo-Gangetic Valley which, with an average rainfall of 21 inches, stretches from the Gujrat district to Delhi and contains almost half the population of the

province and most of the large towns including Lahore, the capital of the province, and the city of Delhi. In the Punjab proper the greatest density is found in a block of ten contiguous districts and states centering round Amritsar and lying in or alongside the submontane tract, where rainfall is comparatively plentiful and the subsoil water level is high. Apart from this group of districts, which is situated in the most fertile portion of the province, the density in the rest of the province depends largely on the variation in the irrigation facilities and agricultural resources, the relation between density and agricultural conditions being so directly proportionate as to indicate conclusively that there is in places pressure on the resources of the land. The beginnings of acute pressure are indeed observable in the extreme east of the province where there has been a steady decline of population in the Ambala and Gurgaon districts and a diminishing rate of increase in other districts, while on the other hand population is rapidly increasing in the irrigated portions of the western plain and has yet received no check there from economic causes. After discussing in detail the condition of each district Mr Middleton concludes that in rural areas, the density is entirely dependent on the conditions of cultivation, which are themselves mainly determined by the two factors of rainfall and irrigation. The relation between these two factors may be expressed thus where rainfall is under 20 inches per annum density on cultivation depends entirely on irrigation where it is over 30 inches entirely on rainfall conversely where less than one-third of the cultivation is irrigated the incidence of population on cultivation depends on rainfall where over two-thirds is irrigated irrigation is the determining factor.

The first census of the Punjab was taken in 1855 when the population including the states and Delhi was about 18 millions. The statement in the

Years.	Punjab.		
	British Territory	States.	Delhi.
1855-1862	1.00	0.11	0.18
1862-1867	0.96	0.11	0.44
1867-1871	1.01	1.04	0.64
1871-1881	0.92	0.25	0.85
1881-1891	-0.18	-0.45	0.70
1891-1901	0.27	0.18	1.81

margin gives the annual rate of increase in the intercensal periods subsequent to 1855. The first period was one of real recovery from conditions of lawlessness and oppression when a depleted population increased at a rate impossible under normal conditions. Thereafter followed twenty years of steady progress under more normal circumstances interrupted by occasional periods of scarcity and disease. By the decade

1881-1901 the possible extension of cultivation under existing conditions had been practically exhausted. Colonization was too recent to afford at present much relief and the population was beginning to press on the resources. The subsequent decade 1901-1911 was extremely unhealthy epidemics of malaria and plague causing abnormally high death rates especially among women, thus accentuating the existing disparity between the sexes. On the other hand the steady development of canal colonization caused a shifting of population from the congested tracts to the new canal areas. In an interesting series of diagrams showing the isopleths of rural population per square mile for the last four censuses Mr Jacob illustrates the steady movement of the population towards the south west under the influence of expanding canal irrigation.

In 1891 the contour line 100 persons per square mile which enclosed the city of Multan was distant no less than 160 miles from the general contour line 1 density of 100. Since 1891 however owing to the development of the Lower Jhelum Lower Chenab and Lower Bari Doab colonies the general 100 density line has advanced toward Multan at an average rate of about 10 miles per annum and in 1911 Multan had been turned, from the point of view of population, from an island into a narrow necked peninsula.⁷⁰

The recent decade opened hopefully and the first five years were on the whole prosperous but a severe outbreak of plague in 1915 put an end to the period of increasing vitality and prosperity. The harvest of 1915-16 was poor and the economic and political difficulties arising from the war were beginning to be felt the birth rate began to fall and the death rate to rise. Disastrous harvest in 1918-19 were accompanied by a severe outbreak of influenza and increasing economic and industrial depression and a further failure of the harvest in 1920-21 entirely disorganized the export market and left prices to the mercy of the local demand and supply. A feature however of the close of the decade was the very marked recovery of the population from the effects of the influenza which is indicated in a rapid rise of the birth rate in the last two years, a rise not found in any other province

The influenza epidemic of 1918 was preceded by three unhealthy years, while mortality from plague in 1915 and from malaria and relapsing fever in 1916 and 1917 had already checked the natural growth of the population. Influenza mortality was heaviest in the south-east of the province the hill districts being affected least. The death rate of the Gurgaon district was 123.1 and that of Rohtak 96.2, Lahore 76, Jullundar 40 and Rawalpindi 26. The mortality was specially severe among young adults of fifteen and upwards and the incidence of mortality on females after the age of five years is conspicuous. The disease disappeared entirely at the end of 1918 and the fact that it did not, as in other provinces, linger in the following year probably accounts for the remarkable recovery shown by the vital statistics at the end of the decade. In spite of the serious setback in 1918 the population of the province has increased in the decade by 5.5 per cent. Changes in the balance of migration to and from places outside the province have not been large enough to affect the variation of the population, but there has been a flow of population from the tracts on the outskirts to the centre and especially as we have seen into the canal colonies. Three large perennial canals have been opened during the decade the Upper Jhelum, the Upper Chenab and the Lower Bari Doab. Known as the Triple Canal Project this irrigation system supplies water to more than 1½ million acres of land in the districts of Montgomery, Multan, Sheikhupura, Gujranwala and Sialkot. The total number of acres irrigated in the province in 1920-21 is over ten millions, an advance of three millions during the decade. The actual gain in population estimated by the Superintendent in the six districts of the canal colonies during the decade by immigration is about 160,000 persons amounting to an average of over 15 per cent on the population figure of the tract in 1911. In spite of adverse conditions economic progress during the decade has been remarkable. The number of primary co-operative societies rose from 1,071 in 1911 to 7,605 in 1921 and the capital invested from 30½ to 216 lakhs. Communications were considerably improved, 188 miles of new line being laid down while the mileage of metalled road rose from 2,619 to 2,937 and, in spite of financial stringency there has been considerable activity in public works of all kinds. There are few organized industries in the province and of industrial development Mr Middleton writes —

“Industrial development is hampered by the separation of raw material and power. Isolation and enormous freightage encourage manufacture for local markets, but prevent manufacture of bulky articles for exports. This encourages partial manufacture of raw materials resulting in diminution of bulk. The demand for manufactures comes from a desire to employ available capital and organising ability. Labour is not available in large quantities without being drawn from agriculture. The food of both the agricultural and industrial population must be produced in the province, and exports must largely consist of food of the same nature. To support industry agriculture must be made to yield more produce per man employed, this must be done, not by ousting wheat, but by growing valuable crops in conjunction with wheat and more especially those which provide labour in those seasons which are now spent by the farmer in idleness.”

25 The area of the United Provinces is, with some negligible modifications, the same as that in 1911 but, owing to the creation in that year of the Benares State a large tract of the Mirzapur district (area 865 square miles and population of 1911, 346,245 persons) and a small portion of the Benares district (area 5 square miles and population 11,593 persons) have been transferred from British to State Territory. The bulk of the work of enumeration fell on Government servants, the land record staff, school masters and other officials being widely employed on census duty. Considerable trouble was experienced in places from the non-co-operation movement in the way of refusal by non-officials to act as census officers and by heads of families to give information. But the difficulties were dealt with successfully and Mr Edye, the Census Superintendent, is convinced that they did not affect the accuracy of the returns and that the present enumeration has been “as complete as it is humanly possible to make it.”

The United Provinces have an area of 112,244 square miles and a population at the present census of 46.5 millions, of which 1.1 million belong to the states. The population, which is higher than in any other province of India, is roughly equal to that of the British Islands and the areas of the two countries do not

The movement of population during the decade 1911-1921 has been Mr Edey thinks, determined entirely by the comparative strength of the epidemic diseases in the various parts of the province 'to some extent to plague, cholera and malaria but overwhelmingly to the influenza epidemic. Except in the year 1913-14 when both harvests were very poor and famine or scarcity was declared in the Jhansi division, in Rohilkhand and in parts of the Agra and Allahabad divisions the agricultural conditions were more or less normal and there was nothing in the conditions of trade industry and prices though all were adversely affected by the war which should seriously affect the natural expansion of the population. The vital statistics though largely vitiated by imperfect registration show some correlation with the known conditions of health. The decade opened with an unhealthy year (1911) in which there was a severe epidemic of plague responsible in itself for a mortality of 7 per mille. Cholera was prevalent and the fever rate abnormally high. The subsequent five years were normally healthy but in 1917 malaria was more prevalent than usual and plague persisted into the summer months. The difference between the birth and death-rates of the first seven years of the decade gives a rate of increase amounting to 10.5 per mille per annum and though this rate is clearly greatly exaggerated and points to defective mortuary registration the figures indicate that the population was steadily increasing by natural causes up to the beginning of the year 1918.

The year 1918-19 is probably, in the matter of health the worst on record. Apart from severe epidemics of plague and cholera the province was devastated in the late summer and early winter by influenza which swept over the country in two epidemic waves. In a few weeks this disease carried off according to the estimate of the Sanitary Commissioner about two millions of the population but in reality as I shall attempt to show later many more.

The damage done by this epidemic is not of course confined to the deaths for which it was directly responsible. According to medical opinion between 50 and 70 per cent of the people were attacked and the sum total of the physical and economic damage done by the disease even where it was not fatal must have been enormous. Influenza persisted in 1919-20, which was also a very unhealthy year. Though plague was negligible there was a fairly severe epidemic of cholera and a large proportion of the population had undoubtedly been left by the influenza epidemic of the previous year too weak to offer serious resistance to disease in any form. Public health was also unsatisfactory in 1920-21. The province was almost free from cholera and plague but malaria was very prevalent."

Mr Edey, who estimates the actual losses from influenza in the neighbourhood of 2,800,000 persons, concludes that the reaction of the population to conditions of health dominates the situation and "completely conceals any reaction there may be to agricultural, economic or commercial conditions" and that it is probably somewhere near the truth to hold the year 1918 accountable for the whole of the abnormal loss of population in the province.

The correlation between the general conditions of health and the movement of population in the various parts of the province are close. The greatest decrease was in the Sub-Himalaya West division (-38), followed closely however by the Western Plains division (-30) and the Central Plains division (-23). The former division suffered less from the influenza than the two latter but had a more unfavourable year in 1917. The East Satpuras, where the population has been practically stationary, had a higher mortality in 1918 than the Himalaya West division but enjoyed better health in the generally unfavourable years of 1911 and 1917. The Central Plains suffered more from influenza than the two divisions last mentioned but was compensated by exceptional well being in 1914, when the death-rate was well below the provincial average. The province loses something under a million persons in the balance of migration. The number of emigrants has slightly decreased since 1911 but there is a more considerable decline, amounting to about 160,000 persons in the number of foreigners enumerated in the provinces, with the result that there is a net loss of about that number in the decade.

26 The Baroda State, with an area of 8,127 square miles, forms a part of the **Baroda State** Gujarat tract and is similar in physical, climatic and cultural conditions to the districts of the Gujarat division of the Bombay Presidency. Except in part of the submontane tracts, where a night enumeration was impossible, the census was carried out on the prescribed night and was not attended by any

special difficulties. The statistics obtained are certainly well up to if not above the average level in India in respect of accuracy and completeness. The state returned a population at this census of 2 126,522 persons, giving an all round density of 262 persons per square mile as compared with 292 in British Gujarat. Baroda is one of the most populous and well developed of the Indian states and

State and District Divisions	Area	Population	Density	Variations of population per cent.				
				1872-1881	1881-1891	1891-1901	1901-1911	1911-1921
Baroda State	8,737	2,126,522	243	+9.2	+20.7	-29.8	+2	+4
Central Gujarat	1,823	707,813	388	+1.9	+3	-21.2	+7	+3.8
North Gujarat	9,814	908,373	234	+8	+12.8	-24.0	+8.8	+1.9
South Gujarat	1,807	1,46,273	186	+18.2	+11.1	-8.8	+11.7	+0.1
Kutchwar	2,863	278,689	132	-8.2	+2.1	-8.7	+8	+12.2

has a higher density than any except Cochin and Travancore. The statement in the margin shows the variation at previous censuses of the population in the four natural divisions into which the state is divided. Baroda was badly hit by the famine of 1900 the loss of population being greatest in the tracts of northern and central Gujarat where, owing to the natural fertility of the soil a fairly constant rainfall, extensive communications and a considerable urban population the aggregation of the population is greatest. The progress of recovery from the famine in the subsequent decade was seriously retarded by constant and severe epidemics of plague. In the recent decade the agricultural conditions were fair up to 1918 though there was considerable loss of crop in the first year of the decade owing to frost. The State was again visited by severe epidemics of plague, and a complete failure of the harvest of 1918-19 was accompanied by a disastrous invasion of the influenza epidemic. The disease raged in all parts, the Kathiawar division suffering the most. The total recorded mortality from plague and influenza was about 112,000 persons, the Superintendent estimates the mortality from influenza at 78,000 persons, or 38.5 per mille and from plague at 45,000 amounting to 23 per mille. The balance of migration was in favour of the state and accounts for 1.2 per cent. of the gain of 4.6 in the population. Under the adverse conditions at the end of the decade a gain of 2.4 by natural causes speaks well for the vitality of the people. Mr Mukerjee writes —

In fact I am inclined to think that in its widespread intensity the distress of 1918 was almost as bad as 1900. That this disastrous year did not have the effect that afflictions of similar magnitude have had on population in previous years shows how scarcity-conditions—and even famine—have ceased to have their demographical importance of earlier days. The improvement in the means of communications and in the level of general intelligence and of foresight has led to this that famines have ceased to kill people. They may affect vitality to the extent of causing little shrinkage in birth rate and affecting the age-distribution of the people but they do little else.

The loss caused by the plague and influenza epidemics has fallen heavily on the early adult age-periods. The age group 15-40 shows a decrease throughout the state and it is significant that everywhere the proportion of married women aged 15-40 per hundred of their sex has decreased. A low range of birth rate is therefore indicated for at least some years. The decade has been one of considerable advancement in the state of Baroda. The area of cultivation has been extended, railway and road communications developed, the number of co-operative societies has increased from 79 in 1911 to 400 in 1919-20 and their working capital from one lakh to 24 lakhs of rupees. An important beginning has also been made in the industrial development of the state. No less than 64 Joint Stock Companies were floated in Baroda and a good many factories dealing with textiles and their connected industries have been opened, while other industries have been planned and started. The number of industrial concerns employing more than 20 persons has increased from 80 in 1911 to 121 in 1921.

General India Agency.

27 With the exception of certain forest and hilly tracts in the Rewa State and of the Bilhal country where a final revision of the figures on one night was not possible the census of the Central India Agency was taken on the appointed night in March. Each independent state carried out its own organization under the general supervision of a Superintendent of Census Operations for this Agency. The figures of the whole Agency were tallied at Indore each

principal state supplying its own staff and dealing with its own figures. There was no political trouble or other disturbing element at the time of the census and Colonel Luard considers that the enumeration was complete as regards numbers, though in the matter of detail a certain degree of inaccuracy is inevitable in the case of a tract of country in a great part of which the inhabitants are backward in education and general intelligence. The area of political control known as the Central India Agency has since the census of 1911 undergone an important modification by the separation of the Gwalior State, which hitherto formed one-third of its area. That State, with an area of nearly 26,000 square miles and a population of nearly three millions, was placed from the 15th March, 1921 in direct political communication with the Government of India and constitutes at the present census an independent unit. The transfer, though convenient in the time of its operation, was to some extent inconvenient from the point of view of census organization, owing to the fact that the territories of the Gwalior State are inextricably intermingled with portions of the Central India Agency as now constituted.

The area of the Central India Agency, as now readjusted, is 51,531 square

Province and Natural Division	Area	Population	Density	Variation of population per cent		
				1901 to 1911	1911 to 1921	1901 to 1921
Central India	51 531	3 007 023	116	+12.8	-2.2	+10.5
West	26 030	1 085 617	116	+13.0	-4.5	+20.8
East	24 802	2,008 406	117	+9.5	-7.0	+9

miles as compared with 77,367 square miles in 1911 and is therefore somewhat smaller than Greece at the present time. The Agency consists of a

collection of states and estates, 61 in number, and the British Pargana of Manpur. The individual administrative units vary in area from the Rewa State, with 13,000 square miles, to petty estates of a few villages. For the purposes of the census the territory was divided on this occasion into two natural divisions, Central India West and Central India East, the main statistics of which are given in the margin. The two tracts are approximately equal in area and population but the Western (Plateau) division with a kinder climate, a more fertile soil, better railway communications and a larger proportion of important towns, is more highly developed than the low-lying country of the eastern tracts.

The first seven years of the decade were on the whole years of prosperity in the Agency. There was some scarcity in 1911-12 in the hilly tract to the south of the Western division, and plague, which accounted for about 40,000 deaths during the decade, was practically confined to this division. After a serious set-back in the famine decade 1891-1901 the Agency had shown a good recovery (13.9 per cent) at the census of 1911. The failure of the present census to show a forward movement is due mainly to the serious epidemic of 1918. The

Agency	Deaths from influenza.	Percentage on total population.
Baghelkhand	200,000	12.2
Bhopal	54,000	5.6
Bundelkhand	50,400	3.9
Indore	37,200	3.3
Malwa	27,800	7.2
Southern States Agency	27,400	4.5

Superintendent estimates that over the whole Agency at least 6 per cent, or between four and five hundred thousands, of the population succumbed to the disease. As will be seen from the statement in the margin the epidemic was most virulent in the states of Baghelkhand and Malwa. The mortality was accentuated by the difficulty of conveying relief to the sufferers in the backward tracts ill served by roads and railways.

No great reliance can be placed on the vital statistics of this tract but they serve to indicate the general movement of the population. Except in the years 1918 and 1919 the births everywhere exceeded the deaths, and after the epidemic period the year 1920 again shows a restored balance in favour of births. The balance of deaths over births in the decade considerably exceeds the decrease of population shown in the census, but there is no doubt that the reporting of births is defective, and all that can be said on the basis of the vital statistics is that they indicate a fair natural increase in the population up to the year 1918, and clearly bring out the heavy mortality of that year and the consequent drop in the birth-rate.

The population figures of the Agency are little affected by movements of persons between the states and other parts of India. Of the persons enumerated in the Agency 91 per cent. were born there and the balance of migration gives an addition of about 83 000 persons against a loss of 43 000 in 1911 though the gain is entirely to the Western division. Nowhere is the density of the population high. The Indore State which shows a rise in population of 10·1 per cent. has 121 persons per square mile the greatest density in any single district being 160. The rapid progress of the town of Indore in industrial and commercial importance is a marked feature of the decade. A small tract in Bundelkhand (the Alampur tract) shows an exceptional density of 393 persons per square mile and the density of some of the districts of the Rewa State which lie in fertile soil is comparatively high while some of the states of the Malwa plateau have between 150 and 200 persons per square mile. On the other hand the smaller states of the Eastern division have a sparse population which sometimes amounts to only sixty or seventy persons per square mile. It is obvious that nowhere is there at present any pressure on the means of production and that the margin for expansion and progress is considerable.

Cochin.

28 The area of the Cochin State is 1 479 square miles and the population 979 080 the increase in the decade amounting to 6·6 per cent. The population as will appear from the marginal table has been steadily increasing since 1881 both

State and National Division.	Area.	Population.	Density.	VARIATION OF POPULATION PER CENT.					
				1881 to 1891.	1891 to 1901.	1901 to 1911.	10 to 20.	1911 to 1921.	1871 to 1881.
Cochin State (Madras and Bombay.)	1,479	979,080	662	-1	+10	+13·2	+13	+6·6	+21·9

by natural increase and by immigration, and the density of 662 persons per square mile for the territory as a whole, rising as high as 1 708 and 12 048 in the coastal tracts, indicates the high degree of prosperity which its advantageous position and favourable climate secure for this State, where rice crops and coconut plantations flourish on a good soil watered by a heavy and regular rainfall. The first half of the decade was a period of agricultural and industrial prosperity and the number of industries employing twenty or more persons has increased from 85 to 92. The agricultural conditions of the latter part of the decade were however poor and the State was visited by the influenza epidemic in 1918. The death rate of that year was high and the balance of migration was not so favourable as in the previous decade. The highest gain in population was in the Trichur taluk where the increase is 12·4 per cent.

Gwalior State.

29 Up till the year 1920 the Gwalior State was included amongst the States of the Central India Agency and in 1911 the census arrangements of the State were made under the general supervision of the Superintendent of Census Operations, Central India, and the results were included in the Census Report of Central India. As the State has, since the 18th March 1921 had direct relations with the Government of India the Census of 1921 was carried out independently as in the case of Hyderabad, Kashmir and the other large states of India and the Report of the Census of Gwalior now forms one of the volumes of the census series.

The Gwalior State has an area of 26,283 square miles, a slight increase in the figures as compared with that of 1911 being due to corrections of survey. In extent the State ranks fourth among the Indian States and is nearly as large as Scotland. The territory which contains a large area of hilly and forest clad country has been divided into three natural divisions, viz., a low lying tract with a climate which varies between the extremes of heat and cold the Malwa plateau, with an average altitude of 1 600 feet and a moderate and equitable climate and a hilly tract with an altitude of 1 800 feet. The marginal statement indicates how the population of the State is distributed over these divisions. The population consists chiefly of Hindus of the lower agricultural and industrial classes with an admixture especially in the more hilly tracts of

aborigines There are twenty-seven towns of which only three however have more than 20,000 inhabitants

State and Natural Division	Area in square miles	Population	Density	Variation of population per cent		
				1901 to 1911	1911 to 1921	1901 to 1921
Coastal strip	1,800	1,400,000	121	+7	+13	+20
Lowland	2,500	1,100,000	100	+14	+1	+15
Plateau hills	1,200	1,100,000	100	+21	+8	+29

The statement also shows the movement of the population in the last twenty years. The total increase in population since 1901 amounts to 39 per cent. The State suffered severely in the great famine of 1900 and the Malwa plateau

was specially badly hit. There was a fair recovery in the succeeding decade (1901-11) but the present census again shows a set back owing mainly to the ravages of the influenza epidemic, the decrease in the State amounting to 13 per cent. There are no vital statistics in this State such as could form the basis of any conclusions as to the expansion of the population in the intercensal period, but in spite of the fact that the seasons of 1911-12, 1913-14 and 1915-16 were in some parts unsatisfactory and that the State was subjected to a severe invasion of the plague in 1911-12, it is probable that up to 1918 the natural increase of the population was proceeding at least at a normal rate. It appears indeed from the agricultural statistics that the Malwa plateau, where expansion was originally impeded by historical reasons and further retarded by the famine of 1900, was rapidly increasing its population along with its cultivated area. The worst year in this State, as elsewhere, is the year 1918 when on the top of a widespread failure of the crops and great economic difficulty came the influenza epidemic. There is no basis on which to calculate the mortality in this year but the State must have suffered at least as heavily as the neighbouring territory in the Central Provinces, United Provinces and Rajputana, and it is probable that the epidemic affected more seriously the people of the low-lying division than those of the hills, as the latter shows a fair increase of population at the census. The balance of migration has been favourable to the State, a fact which is probably due to the return during the decade of a number of persons whom the plague epidemic of 1910 had temporarily driven from their homes. On the whole the Superintendent with the figures of other provinces before him, considers that it is to some extent a matter of congratulation that the population of the State did not show a greater decrease.

30 The decade has not been favourable to the Dominions of His Exalted Highness the Nizam. The State has an area of 82,698 square miles which is rather less than the area of England, Scotland and Wales. It carries a population, according to the recent census, of nearly 12½ million persons. The territory consists of two tracts which, geologically and ethnologically distinct, divide about equally the whole area and population. The north-western division, which is similar in character to the neighbouring tracts of the Bombay Presidency, contains a Marathi speaking people and is known as Marathwara. The country to the south and east is inhabited by speakers of Telugu and hence named Telengana. The black soil of Marathwara is suitable for the growth of wheat and other open field crops, while the heavy rainfall and sandy soil of Telengana favours the cultivation of rice. The marginal statement gives the principal statistics of population and area.

State and Natural Division	Area	Population	Density	Variation of population per cent				
				1881 to 1901	1901 to 1911	1911 to 1921	1881 to 1921	
Hyderabad	82,698	12,471,770	151	+17.2	-3.4	+20.0	+0.8	+2.7
Telengana	41,341	6,419,298	157	+17.5	+4.0	+24.0	+4.5	+46.4
Marathwara	41,357	6,052,472	146	+16.8	-10.0	+16.4	-8.8	+11.5

the density calculated on the cultivated area works out to 339 in Telengana against 202 for Marathwara. Telengana has large forest areas, receives a higher rainfall and is better equipped with irrigation resources and the Superintendent shows, by an analysis of the figures of individual tracts, that the density varies in the State in proportion to the predominance of the rice cultivation. Apart from the greater stability of the seasons in the rice areas he is of opinion that the cultivation of rice

requires, and is able to support, a larger number of permanent agricultural labourers than the open field crops.

Since 1881 when the first census of the State was taken the population has increased by 28·7 per cent, the progress being checked in the famine period of the decade 1891 1901 when distress was especially severe in the Marathwara division. The climatic conditions of the past decade have been on the whole unfavourable and in seven out of the ten years the rainfall was either insufficient or ill distributed. Plague was prevalent throughout the period, causing a mortality of over 194 000 persons, while the death-rate from cholera was heavy in several years. The almost complete failure of the monsoon of 1918 resulted in widespread famine and scarcity in the State and was followed by the invasion of the influenza epidemic, which spread throughout the State and is estimated to have caused a mortality of over 250,000 persons. As in other tracts attacked by the disease the birth-rate dropped below the death rate and, though the registration of the vital statistics in the State is not sufficiently accurate for any detailed deductions to be made from the figures, it is clear that the excess of deaths over births in the latter part of the decade was considerable. The State normally throws off a portion of its population by migration, and the statistics of birthplace show an increase in the number of emigrants and a fall in the number of immigrants as compared with the previous decade. The general result is a loss of population amounting to nearly 7 per cent. in the State the decrease being heaviest in the north western portion of the Marathwara division. The City of Hyderabad which has three times during the decade been visited by plague shows a fall in population amounting to 19·4 per cent.

Kashmir State.

31 Kashmir has an area of 84 238 square miles and a population of 3,320,618 persons.

State and Natural Divisions.	Area	Population	Density.	Increase of population per cent.				
				1881-90	1901-10	1911	1921	1901-1921
Kashmir	84 238	330	39	-12		+		+28
The Sub-montane tract.	5 81	614,193	105			+		
The Outer Hills	562	902 998	161					
The Jhelum valley	113	467 964	41			+		+48
The Indus valley	83,500	279,173	33			+		+84·6

The natural divisions adopted in 1911 have been retained on this occasion and the densities and variations in population are exhibited

in the marginal statement. Kashmir stands highest in point of area and lowest in point of density among the important states of India. About three-fourths of the State consist of uninhabited tracts and mountain ranges and if these be excluded the density rises to the more respectable figure of 147. There is a great diversity of physical and climatic condition in the State and the agricultural circumstances vary in each natural division. The Sub-montane tract and the Jhelum valley have level plains where practically every inch of land is fit for cultivation and rice, wheat, maize and other crops are grown. The whole of the Outer Hills division is typical mountainous country, cultivation is precarious and depends on timely rainfall, while cultivated areas are generally small and separated by long ranges of hills.

The population of the State has increased by 109,302, or a percentage rate of 3·1 as against 8·7 in the previous decade. The rate of increase varies considerably in the natural divisions: from 8·0 per cent in the Jhelum Valley to 1 per cent in the Sub-montane tract. The increase in the Indus Valley is due in part to the increased accuracy of the census, owing to the excellent arrangements made by the Political Agent for the enumeration of this difficult and sparsely peopled country. But most of it is no doubt a genuine expansion due to undisturbed peace and security and to the liberal administration of the chiefs of the frontier Ilakas. The condition of crops in the decade was on the whole normal till the last year which was unusually dry, resulting in severe distress in certain parts of the State and extensive emigration. Influenza raged over the whole State in 1918 and 45 000 victims were recorded though the actual death-roll must have far exceeded this number. Plague and small-pox also carried off a considerable number of people. Migration is of a temporary and fluctuating nature in Kashmir. In winter out-door work is stopped in Ladakh and the other higher tract owing to the snow fall and the labouring classes usually migrate to the adjoining districts in the Punjab. In summer not only do

the migratory labourers return to their homes but there is a very large influx of European and Indian visitors to the State. Emigrants exceeded immigrants by 21,000 in the present census which was taken before the summer influx. Provision is being made for progress in prosperity and population. An important feature of the decade was the establishment of a co-operative department in 1916, five district banks being opened in 1920. Trade was fairly brisk and the value of timber exported increased to a figure four times as great as it was in 1911. The progress in horticulture has been rapid, and the State gardens and orchards are at present a remunerative source of income, the value of apples alone exported from Kashmir having risen from two to seven lakhs in the decade. The silk industry has continued to develop, the number of cocoons reared having increased since 1911 from 35,000 to 50,000, while the number of persons directly or indirectly engaged on the work is about 150,000.

32 The State of Mysore has an area of 29,475 square miles and a population of 5,978,892 persons. The density in the State and its two natural divisions and the variation in the population since 1872 are given in the marginal statement. The Eastern division contains the bulk of the population and the more developed areas of the State, including the majority of the towns, the cities of Mysore and Bangalore, the latter having a large civil and military area, and the prosperous industrial areas of the Kolar Gold Fields. With a higher rainfall and a larger area under irrigation the eastern tracts have a less healthy climate and a backward population. The whole State suffered severely in the great famine of 1877, and some areas in the Western division have hardly yet recovered from the effects of that disaster, the Malnad region disclosing so depressed a condition as to necessitate special administrative measures for its improvement during the decade. The greater part of the progress in population and material welfare in the last thirty years has taken place in the eastern areas and has been assisted by a steady flow of immigrants, chiefly from the neighbouring regions of the Madras Presidency, who were attracted by the employment offered in the Kolar Gold Fields, the growing industrial concerns in the cities and the coffee plantations. At the present census the balance of migration shows an addition of 203,000 foreign-born persons to the State, more than half of the population of the Kolar Gold Fields and about one-third of the civil and military station of Bangalore being foreign. The early years of the decade were favourable, agricultural conditions and public health being good. As in other parts of India the year 1918 was one of calamity for the Mysore State, the rainfall was unsatisfactory, the economic conditions were extremely difficult and the food situation acute. The influenza epidemic was severe specially in the western regions of the State though, owing to the untrustworthiness of the vital statistic registration, no accurate estimate of the death-rate from it can be made. The rainfall failed again in the last year of the decade and the direct and indirect losses, caused by the calamitous years at the end of the decennial period, have combined to reduce the natural increase in a population which is ordinarily capable of rapid expansion. The decade has been one of considerable administrative and industrial progress, railway and tramway communications have been developed, new irrigation works constructed and efforts made to stimulate the growth of commercial crops such as cotton and sugar-cane. The number of schools and pupils in the State has more than doubled during the decade and schemes for industrial, commercial and economic improvements, including the development of the forests, have been started, while the number of co-operative societies has risen from 111 in 1911 to 1,500 in 1921 and their working capital from about 4 to about Rs 78 lakhs.

State and Natural Division	Area	Population	Density	VARIATION OF POPULATION PER CENT					
				1872 to 1881	1881 to 1901	1901 to 1911	1911 to 1921	1872 to 1921	
State	29 475	5 978 892	203	-17.2	+18.1	+12.1	+4.8	+3.0	+18.3
Eastern Division	19 978	4 440 894	223	-21.3	+21.2	+14.9	+7.0	+4.2	+2.5
Western Division	9 485	1 410 058	149	-8.0	+11.6	+6.6	-1.7	-1.8	+5.7
Civil and Military Station Bangalore	14	118 940	8 784	+14.3	+7.0	-10.5	+12.5	+18.0	+45.4

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33 Except in the Bhil tracts, where a non-synchronous enumeration was rendered necessary by the difficult nature of the country, the census in the Rajputana Agency.

Rajputana Agency and Ajmer Merwara was conducted on the standard lines. Each independent state carried out its own organisation, under the general supervision of a Superintendent for the whole Agency who also supervised the census of the British Province of Ajmer Merwara. No disturbing elements prevailed at the time of the census in the Agency but the *Urs* fair in Ajmer Merwara somewhat disturbed the distribution of the population of Ajmer city and the area around it though special arrangements for the enumeration of the pilgrims were made and a separate record of them kept. The Agency which consists of a congeries of twenty-one states and chiefships, has an area of 128 987 square miles and a population of 9,844,384 persons, giving an all round density of 76 persons per square mile. Viewed as a single political unit it is larger in area than any other state or agency but in population comes second after Hyderabad. The individual states of the Agency vary greatly in size, ranging from Marwar which is larger than Scotland to Jhalawar which is considerably smaller than an English county.

The Chief Commissionership of Ajmer Merwara with an area of 2 711 square miles and a population of 495 271 forms an enclave in the middle of the Agency

Provinces and Natural Divisions	Area.	Population.	Density.	ANNUAL % POPULATION PER CENT.				
				1881 1881.	1901 1901.	1911 1911.	1921 1921.	1931 1931.
Rajputana	128,987	9,844,384	76	+29	-29	+1	-6	-10
Eastern Division	32,646	2,291,191	70	+30	-30	+1	-6	-10
Western Division	9,090	644,271	70	+33	-33	+3	-6	-10
Merwara	14,597	2,368,679	162	+33	-33	+3	-6	-10
Ajmer-Merwara	2,711	495,271	183	+4	-4	+4	-4	-4

and was originally divided into two separate districts which were combined into one in April, 1914. The main statistics of the distribution and growth of the

population in the Agency and Ajmer Merwara are shown in the marginal table. The Agency is divided into three natural divisions. The Eastern division, which has the highest density contains the bulk of the population and is mostly a level tract with a fertile soil and a generally sufficient rainfall. It is well irrigated and better served by roads and railways than the other tracts. The Southern division which has the smallest area and population and is inhabited largely by Bhils, is traversed by low ranges of hills enclosing in many parts fertile and well watered valleys. In density it is higher than the Western division which though larger in area than both the other divisions combined has a low average rainfall and is sandy ill watered, and unproductive. Apart from the Abu district, which has been leased to the British Government and is the head-quarters of the Local Government, the density in the individual states varies from 230 persons per square mile in Bharatpur to 4 in Jaisalmer. The country is thinly peopled but the vast stretches of desert land in the west afford little scope for the production of wealth and, in spite of low density, there is a steady outflow of population from the Agency to the Panjab and Bombay.

The first count was made in 1881 and the large increase of 29·0 per cent in 1881 1891 was due partly to improved methods of enumeration and partly to natural causes. In the succeeding decade the Agency was hit severely by the famine of 1900 and also by a virulent epidemic of fever which broke out immediately after the famine. These calamities resulted in a decrease of 29·5 per cent at the census of 1901. In the decade 1901 1911 when conditions were otherwise fairly favourable increase in the population was seriously hampered by constant epidemics of plague and cholera. In spite of an occasional poor year conditions were till 1918 fairly good and the present census would undoubtedly have revealed an increase had it not been for the influenza epidemic of that year and the subsequent agricultural and economic depression. There are no means of calculating the mortality from the disease but the Agency must have suffered at least heavily as the neighbouring British Provinces. Conditions both of agriculture and of health were thoroughly unfavourable in Rajputana during the decade 1911 1921 and there were in the Northern and Eastern division few really good agricultural years. Mortality from plague and malaria was severe in the middle years of the decade and was followed by the scarcity of 1918 and the influenza epidemic in the same year. The epidemic is said to have carried off one fifth of the population of the Jaipur State. Jaisalmer lost during the decade nearly one-fourth of its population. Dholpur about an eighth and Marwar more than a tenth. Conditions were better in the states of

the Southern division, where also the aboriginal population, viz, the Bhils, Mmas, etc, have an enormous power of recuperation. The increase in the Mewar State was nearly 7 per cent, in Banswara 15 per cent and in Dungaipur 18.5 per cent. The tract was free from plague and suffered less from influenza than the Eastern and Western divisions. A part of this increase must, however, be ascribed to improvement in enumeration among the backward people. The Agency also sustains a steady and increasing loss by migration the adverse balance being 627,000 against 553,000 in 1911. In Ajmer-Merwara the decrease of 1.2 per cent is mainly due to plague and influenza, which together claimed 45,000 victims. The Superintendent thinks that had the population not been inflated by the influx of pilgrims visiting the *Uis* fair at Ajmer at the time of the census the actual loss would have amounted to at least 4 per cent.

34 This little state returned a population of 81,721 with a density of ^{Sikkim State} twenty nine persons per square mile. The census was carried out by the State officials under the direction of the Superintendent of Census Operations, Bengal. In a country such as this, consisting chiefly of mountains, forest clad ridges and isolated valleys, a one-night census was impossible and a month was given for the writing up of the schedules. Arrangements were however carefully made and the census was as accurate as is possible under the circumstances. The rapid increase in the population in the last thirty years received a check during the last decade and the return shows a decrease amounting to 7.1 per cent. This reduction is due mainly to the ravages of influenza and of relapsing fever both of which diseases were prevalent for the three years of the decade. There is also, apparently some decrease in the number of immigrants from the State from Nepal, though the statistics of migration between the State and its northern neighbours are necessarily incomplete.

35 The nature of the country in the Travancore State does not admit of ^{Travancore State} house to house visits being made at night for the purpose of a census, and on previous occasions the enumeration has been carried out at different times for different sections of the population. In the present case the census was taken simultaneously throughout the State on the morning of the 18th of March. A large staff of officials was employed as census officers, the majority of the enumerators being school masters. The organization was carefully designed, all the circumstances were favourable and it is believed that the census was accurate and complete.

The Travancore State has an area of 7,625 square miles according to the latest survey, the increase of 32 square miles over the figure of 1911 being due to corrections in survey. The State has been divided into three natural divisions

State and Natural Division	Area	Population	Density	VARIATION OF POPULATION PER CENT					
				1872 to 1881	1881 to 1901	1901 to 1911	1911 to 1921	1872 to 1901	1872 to 1921
Travancore	7 625	4 006 062	525	+3.0	+6.5	+15.4	+16.2	+10.8	+73.3
Sea Coast Division	436	1 817 745	1 296	+2.2	+5.4	+13.5	+15.7	+14.8	+62.6
Inland Division	1 502	1 250 130	833	+4.2	+7.7	+14.7	+15.0	+15.9	+73.1
Mountainous Division	4 687	938 187	200	+7.3	-7.7	+2.8	+17.3	+22.2	+99.2

and the marginal statement indicates the distribution of the population over them. The Sea Coast division, which has a rich alluvial soil and

a rainfall of less than 90 inches, is inhabited chiefly by Musalmans and non-Syrian Christians, cocoanut and rice are largely cultivated here. In the Inland division the chief crops are tapioca, banana and jams, the tract has a rainfall of between 70 and 110 inches and is inhabited chiefly by Malayala Hindus and Syrian Christians. The inhabitants of the Mountainous division are mostly non-Malayala Hindus and tribes, the average rainfall is 110 inches and tea and rubber form the principal crops. The population of the State has been steadily increasing in the last 50 years and now stands at over four millions. Agricultural conditions were good and the death-rate from plague and cholera was small compared with that of the previous decade. The State escaped the virulence of the influenza epidemic and the slight attack of this disease was not accompanied by a high death-rate. The increase was lowest (14.8) in the Coastal division owing to the movement of population, under economic pressure, from this densely populated tract to the tea, rubber and cocoanut estates and to the waste lands of the Mountainous division. The State gains slightly by immigra-

tion but by far the largest part of the decennial increase is due to the natural increase of the population. No less than 30 per cent of the population is Christian, while among both the Malayalam and non Malayalam Hindus of the State widow remarriage is allowed so that to the natural fertility of the South Indian races is thus added a freedom from the restrictions on marriage which usually limit the productive power of the Hindus, while, owing to its favourable climate and position the expansion of population in the State is not subjected to any severe natural checks and the average death rate is consequently lower than in other parts of India.

Section IV—Houses and Families.

Definition of house.

36 The marginal Table gives the number of persons per house and houses per square mile in India at successive censuses. Figures for the Provinces and States are given in Table X at the end of the Chapter. Neither the regional nor the periodical figures are strictly comparable, because there are two definitions of house in use for census purposes, one based on the structural and the other on the social aspect of the house. And it is left to the *Census Superintendent* of each province to determine, in the light of local conditions, which definition should be used. Where the structural criterion is taken a house is ordinarily defined, with

minor local qualifications, as the residence of one or more families having a separate independent entrance from the common way. Where the social aspect is looked to it is defined as the home of a commensal family with its resident dependents and servants. The former type of definition, which was general up to 1891 has gradually been superseded by the commensal definition, which has the advantage of simplicity and ease of application and is expected to afford some clue to the average size of the Indian family. Of the larger provinces only Madras and the Central Provinces still retain the structural view of the house, but this definition is still usually applied to houses in towns and to all buildings of the nature of chawls and lines and to large bungalows, and the census house is therefore everywhere somewhat of a hybrid between a house and a household.

Variations in size of household.

37 The average number of persons per house has not changed in the last decade though there was a decline between 1881 and 1911. The trend of the figures varies in different provinces, but I doubt if they afford substantial ground for any material inference. As the *Census Superintendent* of Madras remarks, the definition is sufficiently comprehensive to cover alike a Rajah's palace and the portable hut (or tent) carried from place to place by a member of a wandering tribe, and variations in the system and practice of house-numbering from census to census must necessarily introduce a further unknown factor. It would for example be expected that the incidence of the influenza mortality would fall fairly evenly upon the individual households and would therefore cause a reduction in the number of persons per house. It does not appear to have done so either in Bombay the United Provinces, the Central Provinces or Rajputana, while in Bengal, where there is a rise in the population there is a fall in the size of the household. The figures are in fact unsatisfactory and though they invite a discussion on the condition of the joint family it is doubtful if they can really be held to illuminate it. The general opinion of the Provincial Superintendents is that they do not do so and that other indications do not show that the joint family system has yet undergone any radical change at any rate in the agricultural tracts of the country. The two main influences, the domestic and the economic seem to operate in opposite directions. Labour and resources generally are more easy to combine and organize when the family remains joint and the economic considerations probably tend to hold the families together. On the other hand it is not easy for large group of married brothers and sisters to dwell together in peace and concord and domestic considerations probably make for disruption. The general consensus of opinion is that the disruptive tendencies are strongest in the proles

sional and educated classes and in urban areas. Mr Lloyd gives the following account of modern tendencies in Assam which is almost purely agricultural —

"I have received a number of interesting notes from correspondents on the subject of the joint family system. There is a general consensus of opinion that the process of disintegration is being continued, but it has not been hastened much in the last ten years. It must be remembered that even before, the family seldom remain united after the lifetime of the brothers, and often broke up on the death of the father. One correspondent (an M L C) writes 'within my memory I have not seen any appreciable change in the system. I have never seen brothers living together as members of a joint family even for a decade of years after their parents' death. In the majority of cases it does not extend beyond one generation.' The causes of the break-up are bitter quarrels, inconvenience of living in the same compound, a wider outlook on life due to modern conditions and a desire to have a separate purse on the part of the younger members of the family. It is the fundamental difference in ideas between the ancient and the modern which appears to have grown somewhat in the decade. Another correspondent describes this as 'the spirit of individualism roused in the country by the spread of education expressing itself, *inter alia*, in a protest against the domineering autocracy of the mother-in-law and the elderly matrons of the family.' These causes are, however, acting more on the educated and urban communities than on the mass of the people at present. Assam being predominantly rural, the process must necessarily be slow. Economic causes also, as I have suggested above in the case of Sylhet, are likely to retard the process in the case of the agricultural population, although the tie of the family is said to be weaker in the case of the poorer classes. The results of the general tendency are of mixed good and evil. Some of my correspondents point to the moral deterioration of the family and the neglect of religious rites, others laud the spirit of individual independence and self reliance, and the growth of an extra-parochial, even national spirit. Perhaps the most serious economic consequence is to destroy the traditional system of co-operative sickness and old-age insurance for which there is at present no substitute."

Mr Sedgwick in Appendix V to the Bombay Report gives the result of a special analysis of the family records in a selected batch of the Bombay Presidency census schedules. The note itself must be studied for the interesting details which it discloses, but he finds that the commonest type of household (the mode) is 4 persons, though owing to a fair number of families of large size the average (the mean) is 5 persons, and that, dividing the population into classes in different economic levels, the size of the family directly varies with its economic position. The households here examined include resident servants who, however, are mainly confined to the economically highest classes. Some further light is thrown on the average size of the Indian household by the results of the enquiry made in various provinces on a special family schedule and described in Appendix VII to this report.

In Baroda the number of occupied houses in the State has increased by 1.3 per cent which is a considerably smaller ratio than that of the increase of the population. Mr Mukerjee, however, thinks, that there is no real indication that the size of the family is increasing. Indeed he writes that all the social tendencies indicate that the family is getting smaller with the advanced education and standard of life and the growing stress in the economic environment.

The family in Bengal, averaging just over five persons, is distinctly larger than in the rest of India and larger in Eastern Bengal than in the rest of the province. The comparative figures of previous censuses show that there is little tendency to the disruption of the family and the slight difference is probably caused by variations in the fertility of the people (the birth-rate) rather than to any tendency in the family to break up.

Section I—Population and economic problems

38 The growth of the population of India and the problems which it presents have seriously occupied the minds of sociologists and economic students of recent years. The statistics obtained at the recent census do not, perhaps, afford the best material for the study of the population problem of India, since they have been largely determined by the visitation of a disease which can scarcely be considered an item in Nature's ordinary programme for the restriction of excess population. In an agricultural country famine is merely one of the recognized extremes in the obvious relation between population and food. Epidemics such as malaria, the disease of waste places, and cholera seem to be bound up with the climatic and physical conditions of the country and are familiar in every degree of

Growth of the population.

intensity. Even plague is recognized as a disease of congested areas and has a close connection with the aggregation of population. Influenza, however, seems periodically to thrust itself an unwelcome exotic, into the picture of Indian life and represents an unknown quantity which is equally fatal in the jungle and in the city and has no certainty of origin, no measure of intensity and no regional limitation.

My predecessor pointed out in 1911 that the rate of increase of population between 1872 and 1911 was equivalent to about 19 per cent. and that at this rate the population would double itself in about a century and a half. We have seen in para. 6 above that the real increase in the last fifty years in the population of India is just over 90 per cent. At this rate the doubling will take another 190 years. But calculations of this kind though of interest, can hardly be taken seriously. Almost every one of the last five decades has witnessed some special disaster. A severe famine in South India checked the increase in the decade 1872-1881. The decennium 1891-1901 was dominated by the great famines of the closing period. Growth in Northern and Western India was checked in the succeeding decade by plague and we have had in the past decennium an epidemic which has caused more concentrated mortality than any previous calamity. The decade 1881-1891 alone was free from any exceptional calamity and is usually considered a period of fairly normal progress. The increase in the population in that decade was 9.6 per cent for India. With this figure we may compare (1) the rate of 6.4 per cent. in the decade 1901-1911 when plague considerably reduced

Difference between the birth-rate and death-rate sustained by the country for certain periods in certain decades.

Province	1891-1901	1901-1911
Bengal	7.0	7.3
Bombay	13.8	6.2
Burma		11.1
Madras	12.3	8.8
Punjab	9.8	8.7
United Provinces	6.4	6.6
Combined Provinces		8.2

the population of Bombay the United Provinces and the Punjab (2) the steady rate of progress in Bengal amounting to nearly 8 per cent. in each of the three decades from 1881 to 1911 and (3) the incremental rates for some of the large provinces for the decades 1881-1891 and 1901-1911 based on actuarial calculation. It is perhaps not an unreasonable estimate to place the probable natural increment in India at her present stage of development and apart from exceptional calamities at between

and 8 per cent in the decade.

The rate of growth for India as a whole is of course the resultant of a number of very different rates in different parts of the country. In discussing the subject in the report of 1911 my predecessor pointed out that increase tends to vary inversely with the existing density of the population. The high rates of increase in the sparsely populated area of Assam, the Central India tracts and Burma contrast with the lower rates in the valleys of the Ganges and Jumna. The rate of growth of population in India is not greater than that of many countries of Europe. It is, however, the product of different conditions, the natural increment being the difference between a very high birth rate and a correspondingly high death rate and obtained therefore, at an enormous sacrifice of life especially of infant life. The high Indian birth rate is largely the result of universal early marriage and uncontrolled marital relations, the rate differing in different communities and regions owing partly to difference of marital customs and partly to variations in fertility. The Muhammadans and aboriginal tribes, who have few widows in the reproductive age periods, have a higher birth rate than Hindus. The birth rate which seems to be higher in the lower strata of society may also vary with racial differences in fertility or according to some modern theories, with the influence of cultural and economic conditions in different stages of development. But any diminution of the birth rate due to influences of the last kind must be very gradual in their action and unless as is extremely unlikely there is some revolutionary change in the outlook of the mass of the people towards marriage it seems impossible that there will be any general downward movement of the birth rate in India for many years to come. On the other hand systematized attack is being made on mortality at every point both officially and privately by the improvement of sanitation, the extension of medical relief and the organized efforts towards infant and maternal welfare. Any substantial success in such measures would mean the widening of the difference between the birth rate and the death rate and a corresponding rise in the rate of increase of the population.

moral and material standard of living, on the one hand, and the average productivity of the area according to existing methods of exploitation on the other hand, and say that if this population continues to increase numerically at its present rate it cannot maintain its material standard of living under conditions as they exist at present. In the various forms in which it occurs the situation as here described, viz., the overtaking of the existing material resources by the expansion of population provides the chief stimulus to progress. It forces the population to enhance the food resources by increasing the productivity of the tract and to overcome the limitations of area by improving the facilities of communication. The enterprise involved, reacting on the mental and moral equipment of the people, widens the scope of their lives and, by raising their standards, creates a new economic stress and thus establishes a continuity of progress by a succession of reactions. In the historical life of a nation or a people the moral benefits of over-population in this sense are probably worth the temporary difficulties and sacrifices which result from the inevitable delays and imperfections in the adjustment of resources to growth. The Census Superintendent of Burma remarks in this respect—

A country is obviously overpopulated in a static sense when, even if all its resources were fully and most advantageously employed, it would be unable to support its population satisfactorily either with its own products or with goods obtained in exchange for its own products. The word *satisfactorily* makes this definition somewhat vague and dependent upon constantly changing standard of comfort and efficiency and moreover it is always impossible to say whether a country's resources are fully and most advantageously employed.

The world's average rate of wheat production is 13 bushels per acre and in England in 1911 the average was 35.5 but Professor Biffen "Yeoman" wheat has yielded 96*. Are the resources of English agriculture fully employed? There is much to be said about that before calling England overpopulated in the sense now considered. That Poland has increased her wheat and rye crops by 250 per cent. in the last ten years suggests that the last word on food production has probably not been said yet in Burma. Malthus, in his *Essay* is commonly supposed to have had the static conception of overpopulation described above but really he understood this term in the kinetic sense and described a country as overpopulated when the rate of increase of the population exceeded the rate of increase of the supply of calories in the triple form of food, clothing and shelter. This is a very different conception indeed.

A country might be overpopulated according to either of these definitions without being verpopulated according to the other. Underpopulation might be ascribed to a country by its own people, if they thought an increase of population would enable them to collect more capital or take advantage of better organization and so raise their standard of life. It might also be ascribed in the case in which an increase of population though it might either depress the standard of living or leave it unchanged would free the country from dread of some military or economic invasion. It might also be ascribed to one country by the people of another if the latter were looking for an area of less economic pressure to which they could emigrate. Moreover as man does not live a human life on the minimum of economic support other and wider considerations enter into the discussion.

In India where the population is predominantly agricultural the economic aspect of density resolves itself into the question of the relation between the population and the productivity of the land. Attempts were made in the Census of 1911 to correlate the distribution and growth of the population with the cultivable and cultivated area and the output of different kinds of crops. It seems clear that while the extent of the cultivable area is a factor in determining the distribution and expansion of an agricultural population, the proportion of the cultivable area which is actually cultivated on the other hand is the result, not the cause of the growth of the population. Correlations between the population and the area cultivated therefore, are chiefly of interest as a means of measuring the enterprise of the people the productivity of the soil under their efforts and their standard of living. They are not so long as the whole cultivable area is not fully cultivated a clue to the pressure of population or to its potential expansion. Except within very wide limits, correlations between population and cultivable area are rendered nugatory by the vagueness of the term 'cultivable area' since land at any particular time classed as uncultivable is continually being opened out to cultivation by irrigation, as in the Punjab and United Provinces, or by the cutting back of forest areas, as in the central tracts of the country and elsewhere. Again the capacity of the land to support population depends, apart from its extent on its scientific treatment and economic organization. And agricultural methods, choice of crops, distribution of holdings, system of tenure are factors which have varying influence in different localities and must be studied in connection with local conditions and problems. Economic pressure may exist at any degree of density. It is responsible for a large amount of the unrest in the tribal areas of

their agricultural population at a higher standard of living than in Western Bengal is sometimes sought in the higher proportion of aborigines in the population of Western Bengal, aborigines whose backward civilisation demands only a low standard of living. This explanation however does not go nearer to the root of the matter than the explanation of the low standard of living in India compared with that in Europe in the backwardness of Indian civilisation. The true explanation of the possibility of a higher standard of living among cultivators in Eastern than in Western Bengal districts is to be found in such an analysis of agricultural statistics which has just been given for eleven districts.

An interesting point which the figures bring out is the fact that though there is a close correlation between density and the development of resources there is no relation between the pressure of population and the crude density. We shall see in a later chapter how the population of the Mymensingh and Dacca districts is being drawn off northwards to the waste areas in the Assam valley.

Another area of very high rural density reaching in parts to 1 000 or even 1,200 persons to the square mile, is found in the coastal tracts of the south of India including the States of Cochin and Travancore. Here, in addition to the favourable climatic conditions, the steady substitution of more valuable crops such as cocoanut, rubber and tea for rice has enabled a very closely aggregated population to maintain a comparatively high standard of living. The Census Superintendent of Travancore writes—

Not only has the population of the State been increasing by rapid strides during the last three censuses but the standard of living has also been rising. That the material prosperity of the people in the advance will be seen from the fact that they have been able to import rice in this decade exceeding by 29 per cent the average annual quantity imported in the previous decade at a cost much higher than that obtaining in 1911 and that they have been able to make remarkable advances on the cultivation of the chief industrial crops of the country namely cocoanut, rubber pepper and tea to the extent of 444 010 51 469 48 763 and 67 569 acres, respectively. The tapoca raised in the country has been sufficient for export after meeting local requirements. The industry of fish has also considerably advanced. After supplying the increased local needs, the average quantity exported has risen from 133 175 cwts per annum in the last decade to 193,671 in the decade under review by over 44 per cent. The export of cocoanut and its products, copra and oil, has increased, by about 15 per cent. Similarly the average annual export of pepper and tea

District and Natural Division.	Mean density per sq. m. in 1921 (Density of rural portion, all given in brackets)
<i>United Provinces.</i>	
Sub-Himalaya, East	213 (298)
Gorakhpur	721 (140)
Benares	487
Almora	874
Rohilkhand	413
<i>India (Ganges Plain (East)).</i>	
Bihar	711 (820)
Benares	874 (704)
Jaunpur	74 (711)
Gorakhpur	721
Ballia	479
Azamgarh	61
<i>Bihar and Orissa.</i>	
North Bihar	42
Patna	57
Chhapra	5.0
Muzaffargarh	977
Darbhanga	70
Bhagalpur	4.1
Patna	403

which was 20,528 caddies and 12,305 897 lbs. in the last decade has risen now to 30 063 and 18,544 659 s.c., by 47 and 51 per cent, respectively. The export of rubber during the decade has been on an average 2,332 149 lbs. per year.

In the Ganges Valley the eastern districts of the United Provinces and the neighbouring districts of North Bihar have areas of specially high density. The marginal statement gives the density of the districts of the Eastern Sub-Himalaya and Indo-Gangetic divisions and of the North Bihar. Mr. Edgewood shows by figures of cultivable and cultivated area that in all these Eastern Gangetic districts of the United Provinces there is still room for expansion of agriculture and he argues from the home loving and unenterprising character of the people that until the limit of cultivating capacity is realised the population will continue to expand. He writes—

In support of my argument I may mention the case of Gorakhpur, a district with which I happen to have a close personal acquaintance. The district has increased in density from 707 to 723. It consists of six tahsils. The headquarters tahsil has the highest density followed closely by Jhansi. The Maharastra tahsil with much jungle and undeveloped land has the lowest density. The headquarters tahsil has now increased in density by six, 111 to 117 (not more than 100 tahsil) and Maharastra by one. Maharastra is reported to be the most unhealthy tahsil in the district. Again in Bundelkhand, (Central India Plateau) with parts of which I am also well acquainted, there is the keenest competition for tenants on the part of landowners and it is commonly said that an extra added man means

extension of canal irrigation. The additional land brought under Government canal irrigation during this decade amounts to 2,500 square miles or an increase of 22 per cent. The mean density of agricultural population is nowhere so high in the Punjab as in the Eastern plains of the Ganges. There has been a steady flow of colonists from congested areas to the canal tracts, amounting to about 160,000 persons in the decade and there are still schemes in hand involving further large extensions of irrigation. In his book *The Wealth and Welfare of the Punjab* Mr. Calvert is able to show that in spite of the enormous margin which still exists for the development of agricultural wealth in this mainly agricultural province the average Punjab peasant already lives at a standard of life which is distinctly above that of a large portion of the peasantry in southern and eastern Europe.

Standard of Living.

39. The number of the population which can be supported by the resources of any tract in any country must be vitally affected by the standard of living of that population. On the one hand the increase in the demand on the luxuries (as opposed to the bare necessities) of life must, like an increase in numbers, stimulate them to develop further the resources of their environment. On the other hand the reduction of the resources of the environment by the law of diminishing returns must either put a limit to the number of the population or cause a retraction in the standard of living. The statistical measure of the standard of living of the Indian population demands enquiries of an exact and difficult nature and though it was at one time thought that such an investigation could be undertaken along with the census operations, it was eventually decided that the practical difficulties were too great. Some information, has, however been collected by certain Superintendents and in the Reports of Assam and Bombay will be found the results of enquiries into family budgets in different types of population, which are valuable additions to the contributions which are being made by the many expert students* of this very difficult and interesting study. The subject is one which is far beyond the scope of a census report even if it were possible on the material yet available, to draw conclusions which are not dangerously uncertain and transient. In a large portion of the population the manner of living has little relation to the economic capacity or resources actual or potential of the family or individual. It is determined by tradition and limited by ignorance. It is not unusual for a family to live in comparative squalor and yet spend large sums on a marriage festival or a law-suit. A large part of the labour troubles in the country is due to the fact that the labourer will only work sufficiently to maintain himself and his family at the lowest standard, and the slackness of agriculture in many parts of the country is the result of low rents which enable the cultivator with a minimum of effort to produce sufficient to support his family at a standard which he is too backward and unenterprising to attempt to improve.

Still less is it true as is so often asserted in Sanitary Reports and elsewhere that the temporary variations in the "economic" circumstances of the people form the principal factor in determining the variations of the birth or death rate though where as in cases of famine or great scarcity the available supply of food falls below the minimum subsistence limit the "economic" factor becomes necessarily dominant. In India as in every other country the most prolific portion of the population is at the lowest stratum of life and modern theories incline to the view that a maximum fertility is associated with a simplicity of life which includes, or at any rate appears usually to be attended by a minimum subsistence diet and that fertility declines as life becomes more complex more luxurious and more individualized and the nervous strain increases. This economic simplicity of living in the larger portion of the population, along with the custom of universal marriage which seems to be independent of economic considerations, and of uncontrolled marital relations has given India a high average birth rate. Diseases due to climate and physical conditions, combined with the non hygienic

*e.g. Mr. Jack in Bengal, Dr. Mass in the Bombay Decree, Dr. Kistner in South India, the Bombay Labour Board in the industrial areas of the Presidency the Economic Committee of the United Provinces, Punjab and other Provinces.

† The word economic is used here in its sense in which it is usually applied, namely with reference to the financial and material resources of living, and its other meaning, viz., as referring to the conditions and customs of household, domestic, social, traditional and material, is much more nearly identical with the idea implied by the standard of living.

20 millions. The common people of Northern India were then undoubtedly almost naked. Blankets were unknown to them, shoes were seldom worn and little furniture was used save a few earthen vessels.¹ The population is now 46 millions, and the people have long been more or less substantially clothed and shod, there are few who do not possess blankets, and brass pots are in almost universal use. The amusement which the peasantry gets out of attendance at the law courts and railway travelling—these two diversions are to the Indian what the picture palace is to the English proletarian—is entirely new since Akbar's day.

In recent times the standard of living has not risen in such an obvious way, but, even during the last fifteen years there has been observable an increasing addiction to the use of small comforts and conveniences such as tea, cigarettes, matches, lanterns, buttons, pocket knives, looking glasses,—even gramophones—and of countless similar trifles. It seems unquestionable that up to the present time the numbers of the people and the standard of living have been rising together. And before it is assumed that the province, or any part of it, is so congested that further increase of population is impossible, it must be remembered that the same assumption was made or implied by the traveller Fitch at the end of the sixteenth, and by Sleeman at the beginning of the nineteenth century. If stage is reached—and when all has been said it may not be far distant, for the density of some of the eastern districts is unparalleled in any rural tracts outside China—when both the population and the standard of living cannot be maintained it is quite possible that the latter and not the former will contract. But perhaps by that time industry will have become a factor for general support. At present it is negligible: such industrial concerns as exist are too concentrated—in Cawnpore and a few other towns—to affect the province as a whole, for labour is immobile and shows no signs of acquiring mobility.

For the above facts and the evidence on which they rest see 'Moreland's India at the Death of Akbar' pages 9 to 23 and 223 to 270. Mr. Moreland estimates the population of Northern India between Malwa and Mughayy at something over 30 millions. His method of calculation for the tract (population = cultivated acres ÷ labour necessary to cultivate an acre) inspires more confidence than that for Southern India, for which the alleged use of armies—with large discount for exaggeration—is the basis used. The *Skil of Al-Ussalibin* and the works of Herodotus suggest that the alleged size of oriental armies cannot be used as evidence at all, because the unknown discount may be anything up to 90 per cent. of the known allegation. An arguable co-argument for the Xerxes Expeditionary Force, six instances would be alleged thousands—actual hundreds. But alleged thousands—actual hundreds would be equally arguable. The numbers of a massed body can only be known by counting: other estimates even when made by educated persons are, as is well known, of the wildest description.

SUBSIDIARY TABLE I

Area of India and the Provinces and States.

Province, State or Agency	AREA IN SQUARE MILES IN		Difference, Increase+, Decrease—
	1921	1911	
1	2	3	4
INDIA	1,805,332	1,802,657	+2,675
Provinces.	1,094,300	1,093,074	+1,226
Ajmer Merwara	2 711	2 711	—
Andamans and Nicobars	3,143	3 143	—
Assam	53,015	53 015	—
Baluchistan (<i>Districts and Administered Territories</i>)	54 228	54 228	—
Bengal	70 843	78,689	—1 856
Bihar and Orissa	83 161	83,181	—20
Bombay	123,021	123,059	+562
Burma	237 707	230,830	+2 868
Central Provinces and Berar	99 876	99 823	+53
Coorg	1 582	1,582	—
Madras	142,260	142 330	—70
North West Frontier Province (<i>Districts and Administered Territories</i>)	13 419	13 418	+1
Punjab and Delhi	100 439	99 779	+660
United Provinces	106 295	107 267	—972
States and Agencies	711,032	709,583	+1,449
Assam State (Manipur)	8 456	8,456	—
Baluchistan States	80 410	80,410	—
Baroda State	8 127	8 182	—55
Bengal States	5 434	5,393	+41
Bihar and Orissa States	28 648	28 648	—
Bombay States	63 453	63,864	—411
Central India (<i>Agency</i>) and Gwalior State	77 888	77,367	+521
Central Provinces States	31 176	31 174	+2
Hyderabad State	82 698	82 698	—
Kashmir State	84 258	84,432	—174
Madras States	10 696	10,549	+147
Mysore State	29 475	29,475	—
North West Frontier Province (<i>Agencies and Tribal Areas</i>)	25 500	25,500	—
Punjab States	17 059	36,551	+508
Rajputana (<i>Agency</i>)	128,987	128,987	—
Sikkim State	2,818	2,818	—
United Provinces States	5 949	5 079	+870

NOTE.—The difference in areas is due to the use of revised survey figures and to corrections for fluvial action, in Bengal, Bihar and Orissa, the Punjab and the United Provinces it is also due to inter provincial transfers

SUBSIDIARY TABLE II

The Population of India at six censuses.

		India	British Provinces	Indian States			India.	British Provinces	Indian States
1		2	3	4	1		2	3	4
Total Population	1921	318 942,480	247 003 293	71 939 187	The above figures are inclusive of the population of areas newly enumerated at successive censuses as follows —				
	1911	315 156 396	243 933 178	71 223 218	Total Population of new areas in—	1881	33,139 081	14 028	33,124 453
	1901	294 861 056	231 259 098	63 101 958		1891	5 713 902*	3 112,994	2,600 908
	1891	287 314 671	220 879 388	66 435 283		1901	2,672,077†	1 654 377	1 017 700
	1881	2,3 896 830	198 545 380	55 350 950		1911	1 793 365	94 495	1 698 870
	1872	206 102,300	184 858 172	21 304 188		1921	86 633	86 633	
Males	1921	163 095 554	126 872,110	37 123 438	Male Population of new areas in—	1881	17 492,340	12,640	17 479 700
	1911	161 338 935	124 707 915	36 631 020		1891	2,872,613	1 507 043	1 365 470
	1901	140 951 824	117 482,836	32 468 988		1901	1 862,651	837 440	525 211
	1891	146 769 629	112,394 551	34 375 078		1911	945 346	47 581	897 705
	1881	129 949 290	101 165 117	28 784 173		1921	43 781	43 781	
	1872	106 055 545	95 136 615	10 918 930					
Females	1921	154 946 926	120 131 177	34 815 749	Female Population of new areas in—	1881	15 046 741	1 988	15 644 753
	1911	153 817 461	119 225 263	34 592,108		1891	2,793 074	1 605 051	1 187 123
	1901	144 409 232	113 776 262	30 632,970		1901	1,283 297	700 808	492,489
	1891	140 545 042	108 484 837	32,060 205		1911	848 019	40 914	801 105
	1881	123,947 040	97 380 263	26 566 777		1921	42,852	42,852	
	1872	100 106 615	89 721 557	10 385,258					

NOTE.—The new areas at each census have been detailed in the title page to Imperial Table II

* Sex details of 48 315 persons are not available

† Sex details of 26 129 persons are not available

SUBSIDIARY TABLE III.

Population distributed by Provinces and with variation per cent. in the population and mean density per square mile.

Serial No.	Province, State or Agency	Area in square miles	POPULATION			PERCENTAGE OF INCREASE (1901-1911)			MEAN DENSITY PER SQUARE MILE				
			1911			1901			1901				
			Female	Male	Total	Female	Male	Total	Female	Male	Total		
	INDIA	1,808,828	118,948,988	121,908,884	240,857,872	118,118,888	121,908,884	+1.8	+7.1	+84.7	137	133	138
	Provinces	1,808,828	118,948,988	121,908,884	240,857,872	118,118,888	121,908,884	+1.8	+7.1	+84.7	137	133	138
	Andhra Pradesh	711	96,871	98,888	195,759	98,888	96,871	-1	+6.1	+25.0	138	138	138
8	Assam and Naga	8,148	87,888	90,888	178,776	88,888	87,888	+1	+7				
9	Bihar	81,473	888,814	1,148,888	2,037,702	888,814	1,148,888	+1	+12.2	+40.8	138	138	138
4	Bombay	21,888	788,888	1,100,888	1,888,776	888,888	1,100,888	-1	+8.8				
	Bengal	88,877	7,888,888	11,888,888	19,777,776	8,888,888	11,888,888	+	+8.8	+27	878	881	881
8	Bihar and Orissa	11,888	77,888,888	12,788,888	90,677,776	77,888,888	12,788,888	-	+	+81	888	881	887
	Bombay	187,87	78,788,888	1,148,888	18,937,776	78,788,888	1,148,888	-1.8	+	+11	188	188	188
	Bombay	822,707	12,888,888	8,788,888	21,677,776	12,888,888	8,788,888	+	+11	+88.8	88	88	88
	C. and Bazar	21,888	12,888,888	888,888	13,777,776	12,888,888	888,888	-8	+	+44	138	138	131
30	Coorg	1,888	188,888	88,888	277,776	188,888	277,776	-8	-27	-17	188	11	11
11	Dakshin	888	188,888	88,888	277,776	188,888	277,776	+	+8.8		888	887	884
28	Madras	12,888	12,788,888	12,188,888	24,977,776	12,788,888	12,188,888	+	+	+88	887	881	888
18	N. W. F. Provinces	88,81	8,888,888	2,17,888	11,067,776	8,888,888	2,17,888	+81	+78.7		188	88	118
	Punjab	88,888	12,888,888	1,188,888	14,077,776	12,888,888	1,188,888	+1	-8		188		178
18	United Provinces	12,814	12,888,888	12,888,888	25,777,776	12,888,888	12,888,888	-8	-8	+	14	277	277
	Madras and Assam	88,888	12,888,888	12,888,888	25,777,776	12,888,888	12,888,888	-1.8	+11.8	+88.8	118	138	188
2	Madras State	8,127	2,128,888	788,888	2,917,776	2,128,888	788,888	+1	+1.1	+8	288	884	888
17	Central India (Agency)	81,881	8,888,888	8,888,888	17,777,776	8,888,888	8,888,888	-8	+12		88	127	128
18	Madras State	1,878	778,888	888,888	1,667,776	778,888	888,888	8	+12	+22	882	878	887
18	Madras State	28,877	1,188,888	1,888,888	3,077,776	1,188,888	1,888,888	-1	8		121	122	117
30	Hyderabad State	12,888	12,888,888	1,188,888	14,077,776	12,888,888	1,188,888	-8.8	+88.7		111	81	188
21	Madras State	8,184	8,888,888	1,177,123	10,066,011	8,888,888	1,177,123	+	+		88	87	84
22	Madras State	88,878	8,888,888	8,888,888	17,777,776	8,888,888	8,888,888	2	+	+12	882	187	88
23	Madras State (Agency)	12,888	8,888,888	1,177,123	10,066,011	8,888,888	1,177,123	-8	8		88	88	78
	Madras State	8,114	81,771	41,888	123,659	81,771	41,888	-1	88	-	12	81	81
23	Madras State	882	888,888	8,888,888	9,777,776	888,888	8,888,888	8	18.2	778	882	882	888

NOTE.—The figures for the Provinces are inclusive of the States attached to them except in the case of Madras, where they exclude Cochin and Travancore.

SUBSIDIARY TABLE V

Reported birth rate per mille during the decade 1911-20 in the main Provinces.

PROVINCE.	NUMBER OF BIRTHS (WITH SEXES) PER MILE IN										AVERAGE BIRTH-RATE PER MILE AMONG THE SEXES.		
	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	Provinc.	Males.	Females.
Assam	21.8	22.8	23	21.9	22	20.4	21.4	20	20	21.5	22.5	6.7	15.4
Bengal	26	26.2	23	23	21	21	23.9	23.9	27	26.9	22.8	17.9	15
Bihar and Orissa	42	42.2	42	42.9	40	38	40	37.3	39	32	39.2	19.9	1
Bombay	26.0	26	26	22.4	27.2	26.9	23	21.4	22	26.9	21	17.8	24.4
Burma	22.9	26	26	26.4	22	22.7	20	20.9	20.9	22.9	22.5	7.6	24.3
Central Provinces and Berar	40.9	40.2	40.2	31	43	42.9	36	40.2	34.9	36.9	43.5	26.9	22.2
Madras	20.4	20.9	22.9	22	21	22.5	22	20.9	20.5	20.4	19.7	13.9	11.9
North-West Frontier Province	28	27	26.2	22.7	21	22.9	27	20	20.4	20.4	20.9	13.2	14
Punjab	42	45	45	46.9	42	42.9	45	39	40.9	46	42.5	36	29.8
United Provinces	22	22.4	27	24.9	23.5	22	19	20	20	20.9	23	22.9	20.4

SUBSIDIARY TABLE VI.

Reported death rate per mille during the decade 1911-20 in the main Provinces.

PROVINCE.	NUMBER OF DEATHS (WITH SEXES) PER MILE IN										AVERAGE DEATH-RATE PER MILE AMONG THE SEXES.		
	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	Provinc.	Males.	Females.
Assam	8	8	8	8	10.9	10	17	16.1	19	21	12	12	1
Bengal	12	12.9	12.7	12.7	12.9	17	16.2	19	19.9	16	12	11.7	10.9
Bihar and Orissa	20	21	20.1	20	22.9	22.8	24.5	19.7	40	37.9	26.2	17.9	10.9
Bombay	20	24.9	20.9	19	19	19.9	19.1	13.9	16	16.9	16.1	17.4	17.4
Burma	26	27	25	24	26	24	26.1	20	17.1	19	17.9	16.9	16.7
Central Provinces and Berar	24.7	22	20.8	19.7	22.9	16	26	16.9	19.9	19.1	14.9	14.1	16.2
Madras	12	14	17.4	16	12.9	17.9	16	13.9	17.2	12.9	13	12.4	16.4
North-West Frontier Province	16.4	16.4	15.7	15.8	15.4	16	16	16	15	15.4	15.9	16.9	15.1
Punjab	14	16	16.2	16	16	17.7	17.9	11.9	16.2	16	16	14.4	16.9
United Provinces	16	16.9	14.8	12	10.9	10	17	16.4	11.7	17.9	16.2	16.1	16

SUBSIDIARY TABLE VII.

Comparison between census figures and vital statistics.

Provinces or State	IN 1911-20 TOTAL NUMBER OF		EXCESS PER MILE OF POPULATION OF 1911-20—		EXCESS (+) or DEFICIENCY (-) of Births over Deaths	INCREASE (+) or DECREASE (-) of Population of 1921 COMPARED WITH 1911.	
	Males.	Females.	Males.	Females.		Actual population.	Actual population.
Assam	1,938,799	1,895.	21	21	+ 66,215	+ 562,864	+ 936,396
Bengal	1,898,867	1,131,867	21	21.1	+ 714,366	+ 1,446,314	+ 1,574,986
Bihar and Orissa	18,264,661	12,104,908	26	23	+ 1,243,123	+ 667,793	+ 473,15
Bombay	867,893	7,223,808	14	16	+ 865,21	+ 6,712	+ 227,864
Burma	2,223.5	2,712,124	23.4	27	+ 1,60,000	+ 967,21	1,604,973
Central Provinces and Berar	1,223,891	6,109,612	23	23	+ 13,970	+ 178,893	+ 13,634
Madras	1,14,865	11,622	13	16	+ 14,843	1,250,34	1,4,201
Punjab	8,668,866	7,668,867	13	16	+ 1,668,278	1,250,34	1,4,201
Madras	1,867,142	10,867,827	16.7	15	+ 620,16	+ 1,236,253	923,79
North-West Frontier Province	664,964	61,121	12	10	+ 64,636	+ 1,236,253	1,127,79
United Provinces	78,776.5	14,814,223	12	16	+ 1,250,34	+ 1,250,34	+ 1,250,34
Punjab State	1,668,866	76,664	16	16	+ 21,645	78,867	91,79
United State	1,123,123	1,232,243	16	1	+ 21,645	78,867	91,79
Hyderabad State	978,772	1,877,796	7	7	+ 664,967	+ 7,71,61	+ 91,664
Mysore State	1,280,822	1,394,126	12	12	+ 178	+ 123,975	+ 178,999
Tamil Nadu State	677,879	1,34,971	19	19	+ 1,664	167,294	177,79

SUBSIDIARY TABLE VIII

Reported deaths from certain diseases per mille of each sex in the main Provinces

DISEASE.	Sex.	Actual number of deaths in										TOTAL	Average annual rate per mille
		1911	1912	1913	1914	1915	1916	1917	1918	1919	1920		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
ASSAM.													
Fever	Males	42 024	41 504	46 451	44 330	48 715	51 814	51 008	84 807	82 455	61 877	554 534	17.7
	Females	38 780	30 814	40 098	38 800	43 024	45 149	44 610	74 495	71 080	50 560	485 090	10.7
Cholera	Males	3 952	7 356	8 621	4 881	14 104	6 322	5 589	7 460	17 851	1 848	78 074	2.5
	Females	3 523	6 947	7 783	4 386	12 785	6 277	5 373	6 617	16 126	1 078	70 890	2.4
Small Pox	Males	880	2 036	1 526	1 407	2,256	1 780	2,311	1 338	772	1 014	15 832	0
	Females	893	2,160	1 268	1 168	1 820	1 535	1 805	1 109	669	680	19 104	0
BENGAL.													
Fever	Males	458 673	407 411	407 890	544 472	550 017	477 922	458 650	713 723	639 030	593 523	5 432,231	23.3
	Females	423 003	461 782	467 651	516 569	513,242	431 953	424 109	644 183	590 221	550 898	5 024 216	22.6
Cholera	Males	35 067	51 042	41 531	47 738	69 936	37 936	23 898	43 593	67 601	29 762	447 704	1.9
	Females	32,083	44 425	37 367	41 486	61 743	32 000	21 123	38 786	57 348	24 437	301 098	1.8
Small Pox	Males	4 232	4 602	4 099	5 550	17 904	7 573	3 782	4 731	20 408	20 013	93 803	4
	Females	3 698	3 685	4 063	4 376	14 881	6 317	3 228	3 845	16 542	16 177	70 612	3
Plague	Males	1 337	1 383	703	397	145	84	112	223	238	40	4 718	
	Females	542	612	281	157	54	26	51	66	136	20	1 045	
BIHAR AND ORISSA.													
Fever	Males	385 750	337,713	326 058	315 630	359 740	334 027	308,009	700 005	576 331	396 361	4 118 142	24.4
	Females	358 334	307 013	290 508	294 232	337 090	358 806	377 232	675 870	464 324	385 699	3 835 798	21.9
Cholera	Males	45 090	30 205	36 632	16 204	44 857	40 350	55 803	105 733	54 746	17 469	458 104	7
	Females	43 487	37 818	33 747	15 911	43 492	44 223	53 817	99 851	49 081	12 872	435 199	2.5
Small Pox	Males	1 684	1 237	2 044	3 059	8 316	6 353	3 520	3 192	5 597	12 609	47 623	1
	Females	1 693	1 120	1 861	2,719	7 210	5 521	3 114	2 810	4 578	10 392	41 142	
Plague	Males	31 605	25 109	15 017	27 041	11 702	10 798	19 446	23 117	7 215	8 301	180 011	1.1
	Females	42,164	33 215	23 766	37 203	15 539	14 551	25 993	30 415	6 380	10 897	240 126	1.4
BOMBAY.													
Fever	Males	110 152	146 098	126 386	133 231	115 072	134 680	152 054	622 061	143 883	139 596	1 829 802	18.0
	Females	106 875	139 623	119 933	125 933	109 725	127 732	146 865	661 952	130 876	126 496	1 790 010	16.1
Cholera	Males	3 041	32 785	2 051	8 950	202	10 331	9 012	4 812	27 044	1 116	99 944	1.0
	Females	2 776	31 720	2 483	8 829	175	9 610	7 091	4 022	24 507	931	92 944	1.0
Small Pox	Males	2 476	3 295	4 072	2,100	772	1 712	1 547	4 306	3 242	1 880	26 392	2
	Females	2 251	3 036	4 861	2 109	653	1 577	1 548	3 757	2 990	1 056	24 438	3
Plague	Males	51 108	14,557	12,021	10 694	21 943	39 100	80 246	38 386	4,924	6 876	290 455	2.8
	Females	49 291	14 427	12,667	9 366	21 881	40 407	82,028	41 092	4 702	6 931	283 442	3.0
BURMA.													
Fever	Males	41 890	46 858	44 978	41 486	45 647	42 296	43 788	96 247	64 723	53 979	521 795	10.4
	Females	34 246	39 114	37 989	34 041	38 598	35 485	37 523	93 265	55 363	46 513	452,729	0.4
Cholera	Males	2,611	4 365	2 767	1 239	9 734	1 154	1 298	2,429	7 833	2,046	35 474	7
	Females	1 580	2 821	1 572	894	7 863	519	648	1 849	5 427	1 353	24 424	0
Small Pox	Males	3 580	4,546	1 653	169	157	483	311	435	2 333	1 077	16 395	2
	Females	2 465	3 411	1 163	89	63	224	243	315	1 534	1 176	10 735	2
Plague	Males	3 624	1 851	2,535	4 297	2,538	4 491	3 744	5 007	2 465	3 014	33 616	7
	Females	2,430	1 103	1 723	3 191	2,102	3 211	2,789	3 833	1 932	2,469	24 819	5
O P AND BERAL.													
Fever	Males	122 494	140 046	102,273	121 754	121 064	131 077	116 623	571 144	158 810	181 219	1 766 504	25.5
	Females	117 095	130 116	93 261	112 774	116 770	123 708	109 581	576 026	146 912	165 057	1 694 820	24.1
Cholera	Males	1 582	16 095	7 762	10 157	2,940	19 858	331	1 735	32,272	1 748	95 370	1.4
	Females	1 416	17 323	7 524	10 188	2 713	19 347	369	1 616	29 817	1 743	92 062	1.3
Small Pox	Males	924	2 457	3 330	2,432	617	183	234	1 123	3 002	1 180	16 388	2
	Females	790	2 099	3 086	2 149	534	156	218	1 063	3 042	990	14 525	2
Plague	Males	14 104	9 351	253	469	10 257	14 039	24 538	5 429	4 536	6,871	90 802	1.3
	Females	13 774	9 848	259	427	10 007	13 690	23 593	5 664	4 633	7 503	89 358	1.3
MADRAS.													
Fever	Males	151 392	155 493	135 858	154 574	146 502	148 079	162 343	435 056	201 699	162,423	1 851 419	0.1
	Females	147 296	150 078	132 166	153 046	143 726	144 412	159 559	463 332	201 890	162,575	1 858 890	0.1
Cholera	Males	30 906	48 424	19 854	35 933	16,232	8 813	30 785	64 139	47 491	16 537	319 254	1.6
	Females	27 178	44,073	17 876	32 516	13 866	7 922	28 154	58 124	45 771	14 552	290 032	1.4
Small Pox	Males	11 902	8 804	7 479	14 850	12 323	11 146	17 871	30 015	21 513	7 197	142,250	7
	Females	11 825	7,730	7 923	13 539	11 715	10 767	17 087	28 737	23 219	6 600	135 432	6
Plague	Males	8 060	3 368	2 640	2 426	1 093	5 663	12 920	6 765	2 782	7 001	53 528	3
	Females	7 125	3 283	2 490	2 676	1 986	5 635	11 788	6 094	2 876	7 651	51 804	2
PUNJAB.													
Fever	Males	157 722	143 313	170 474	175 535	146 631	193 553	259 959	651 500	192,459	199 701	2,290 907	21.6
	Females	144 095	131 727	161 224	169 960	138 153	182,450	250 833	635 627	172 886	171 671	2,158 852	24.7
Cholera	Males	612	1 081	3 267	3 857	7 513	930	802	151	4 856	80	23 449	2
	Females	348	752	2 544	2 709	5 693	721	563	106	3 705	58	17 279	2
Small Pox	Males	2 603	15 700	20 126	1 519	888	1 531	708	1 530	8 103	5 118	57 886	0
	Females	2 421	14 579	18 591	1 331	806	1 355	709	1 502	7 262	4 201	52,777	6
Plague	Males	84 508	14 825	8 041	32 048	108 329	1 639	4 456	48 008	5 390	3 035	311 170	2.0
	Females	90 837	14 080	8 936	31 962	113 646	1 639	4 310	47 607	5 076	8 102	322 700	3.7
UNITED PROVINCES.													
Fever	Males	633 840	510 690	590 491	548 235	500 759	520 393	673 894	1 682 649	820 016	756 494	7 239 060	20.8
	Females	633 603	456 891	527 064	502,221	456 540	477 103	590 025	1 535 029	755 016	635 882	6 011 999	20.6
Cholera	Males	60 380	9 777	31 211	10 700	44 753	16 849	10 818	61 225	42,060	3 739	297 518	1
	Females	57 390	9 117	29 216	15 792	45 755	10 451	10 622	53 521	39 395	3 213	235 301	1.3
Small Pox	Males	820	1 602	4 394	6 614	1 266	825	1 063	1 531	5 021	3 442	31 574	1
	Females	603	1 409	3 702	5 340	1 038	699	948	1 377	5 072	2,912	26 291	1
Plague	Males	149 998	51 076	49 093	47 446	25 874	21 801	56 063	79 861	7 691	10 946	590 182	2.0
	Females	182,392	63 867	58 630	50 508	32,254	27 567	72,421	94 944	9 639	13 926	612,155	2.0

SUBSIDIARY TABLE IX.

Comparison of area and population of Districts in the main Provinces.

Province	Number of districts	AREA AND POPULATION OF DISTRICTS			Maximum population.		Number of districts with population exceeding one million.	
		average area	average population	Maximum area in square miles				
Aman	12	6,415	620,863	Lumbini Khasa	7,327	Syabak	2,541,831	1
Dogra	22	8,744	1,667,686	Mysoremah	6,528	Mysoremah	4,837,726	21
Khar and Orissa	21	2,969	1,619,122	Kashmir	7,311	Dachbaga	2, 13,228	12
Bombay (including Aden)	26	41	666,896	Tam and arkar	2,626	Bombay City	1,375,814	6
Burma	48	6,426	207,569	Federated Sta States	26,512	Federated States	1,622,812	1
And Java	12	6,346	662,896	Kapur	6,767	Kapur	1,666,576	
Madras	17	6,366	1,667,576	Agony	6,860	Kabhar	6,666,571	26
W F Province		6,864	486,286	Dara I-mad Khasa	6,43	Pakhar	667,567	4,000
Punjab (including D.H.B.)	26	2,442	712,577	Kangra	6,878	Lahore	1,122,228	
United Provinces	48	2,371	642,228	Gandari	6,812	Gandari	1,666,228	12

Including Lardarive

SUBSIDIARY TABLE X.

Persons per house and houses per square mile.

Province, State or Agency	VILLAGES FORMED BY PERSONS PER HOUSE					VILLAGES FORMED BY HOUSES PER SQUARE MILE				
	1901	1901	1901	1901	1901	1901	1901	1901	1901	1901
HINDIA.	4.8	4.8	8	2.4	8.8	66.1	66.6	21.8	66.9	21.7
Inner Hindia						62	62.2	20.2	27.2	22.7
Andaman and Nicobar										
Aman				4		27	27	22.1	22	9.6
Bahadur		9				5	5	5		
Dogra			5			16	16.1	16.6	66.6	5
Other and Orissa		2	5	7		67	66	62	71	66
Bombay						26	26.5	26	25	21.1
Aden						41.4				
Burma						7	19.7	8	6.2	
Central Provinces and Berar		4	6			2	24.6	21.8	22	22.7
Cowp	6				7	19	21	19.8	1	1
Dell		4			6	72			27.2	22.1
Punjab						66		26.7	27.2	22.1
Madras			5		5	24.5	25	26.2	27.6	26.6
W. F. Province		5	6.1	1	6	22	22	21	17	16
United Provinces		4	5	2.7		96	91.3	76.7	7	62.6
Kashmir State				1		21	21	66	62.1	26
Central India (Agency)				2.6	6	25				
Orissa State						27.8				
Cochin State	5			5	6	126	126	167	66.1	72.6
Hyderabad State				5		22	22	22	27	21
Kashmir State		6				7		7	2.6	
Mysore State	5	2.6		5	7	24.4	26	27.7	22	25
Kashmir (Agency)	5		6.1	2.6		7	1	5	1.7	1
Big in Parts										
Madras State		5		5		26	27	22	16	72.2

Note.—The figures for Provinces are inclusive of the States attached to them except in the case of the W. F. Province, where they are for British India only and Madras where they exclude Cochin and Travancore.

CHAPTER II.

Urban and Rural Population.

Urban Areas

40 This chapter deals with the distribution of the population in urban and rural areas, distinguishing the categories of those who live in cities, towns and villages. Introductory remarks. It is necessary to remember that we are dealing, subject to certain small exceptions, with the population as it was distributed and enumerated on the census night. Thus, besides those who were for various reasons located at the time in places other than their normal place of domicile, there was a floating population of travellers by rail, road and water, persons temporarily residing in camps or in the jungle and so forth, for whom special arrangements had to be made. This floating population amounts to 690,665 persons, forming the insignificant fraction of about one person in every 500 of the total population of India and in no individual province or state exceeding the proportion of 18 per mille. So far as the general population is concerned a comparison between the place of birth and the place of enumeration gives some indication, at any rate in the district unit, of the extent to which the "*de facto*" and the "*de jure*" populations coincide, and it will be seen in para 62 below that 90 per cent of the total population of India were enumerated in their district of birth. It is obvious that this proportion cannot be applied to the case of towns, both because the unit taken is smaller and because a town, with its large variety of interests and occupations, is usually rather a dynamic than a static unit, which continually attracts or throws off population according to the circumstances of its development at the time being, while that population itself is of a more fluid and mobile type than is usually found in rural areas. Thus a comparison of the enumerated population with the population returned by birthplace would be of little help in attempting to obtain statistics of the normal or resident population of any city or town. At the same time the returns of birthplace are interesting in the case of the cities and larger industrial towns as indicating, not necessarily the number of enumerated persons who were or were not permanent residents in the town, but the chief directions from which the concentration into the urban centre has taken place. Such statistics have been tabulated for all the urban units treated as cities.

41 A town was defined as in 1911 and 1901 in the following terms —

Definition of town.

Town includes—

- (1) Every municipality
- (2) All Civil lines not included within municipal limits
- (3) Every Cantonment
- (4) Every other continuous collection of houses inhabited by not less than 5,000 persons which the Provincial Superintendent may decide to treat as a town for census purposes. In Indian States, where there are no municipalities, this definition will have to be extensively applied.

NOTE.—In dealing with questions arising under head (4) the Provincial Superintendent will have regard to the character of the population, the relative density of the dwellings, the importance of the place as a centre of trade and its historic associations, and will bear in mind that it is undesirable to treat as towns overgrown villages which have no urban characteristics.

The value of the definition has been fully discussed in previous census reports and it is not necessary to repeat the discussion beyond explaining that, while the first three conditions cover places that are, as a rule, of a more or less urban character, they would not in themselves be entirely comprehensive. The fourth condition renders possible the inclusion by the local officers of other places

which, though they have not attained local self-government, still possess urban characteristics differentiating them from the larger class of purely agricultural village. It will be seen from the statement in the margin that the additional urban element which this last clause introduced is of some importance, since the number of towns not falling within clauses 1, 2 and 3 of the definition at the present census amounts to 1 040 containing a population of seven million persons or 23 per cent of

	Number	Population	Percentage of total urban population
Total towns	8,112	23,618,776	100
Municipalities, Towns, Panchayats and Cantonments	1,572	23,267,511	73
Other towns	1,040	7,512,265	27

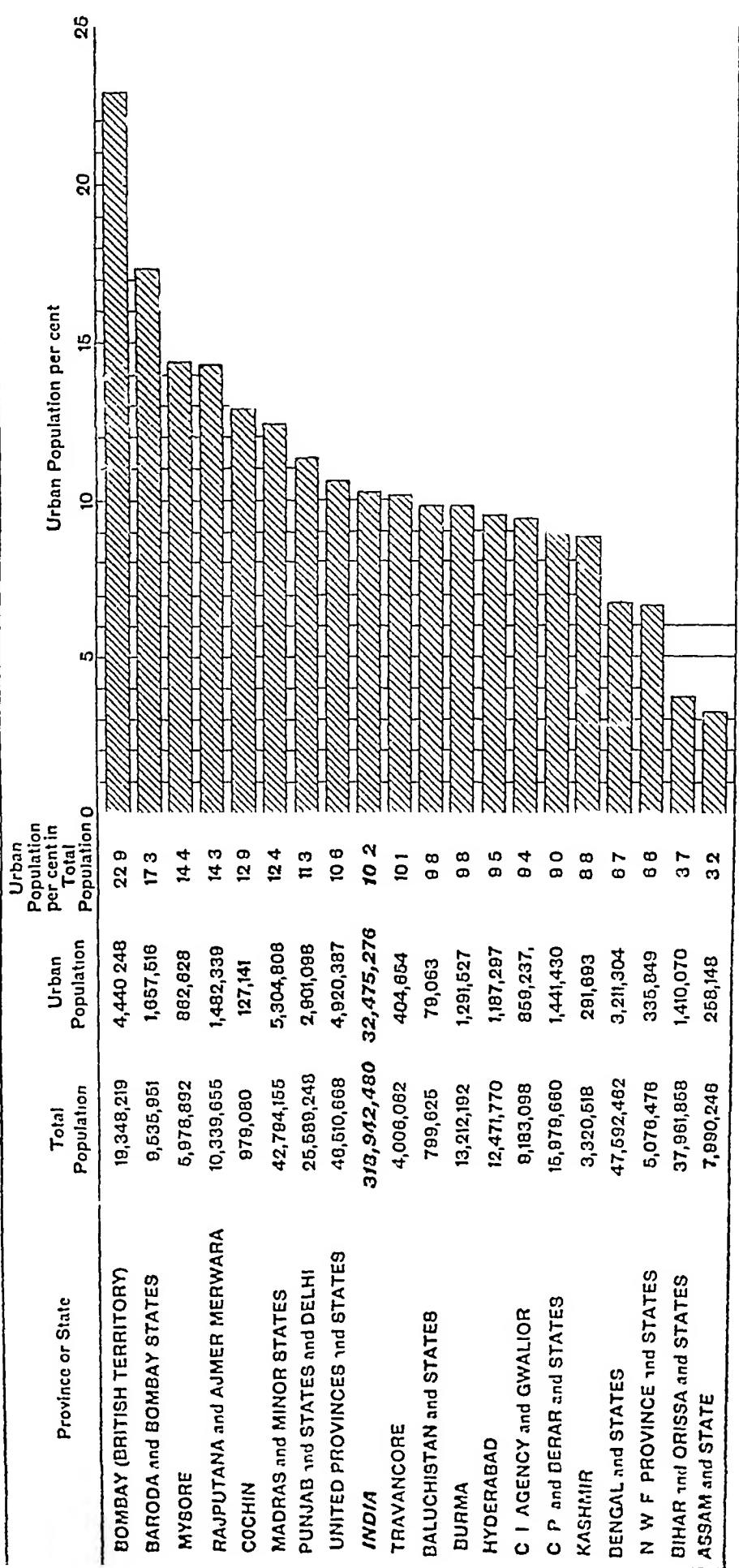
the total town population of India. It is always difficult to make a clear distinction between a small town and a large village, and there is little doubt that the municipalities and other places treated as towns contain a considerable population which is largely rural in character especially as the boundaries of some municipalities are, owing to local sentiment widely extended and include a good deal of agricultural land.

No rigid definition of city was prescribed but towns of 100 000 or more in habitants were *pro facto* classed as cities while in this class were also included such other larger towns as the local Governments selected as being of sufficient importance to justify the more detailed presentation of statistics which was prescribed in the case of cities.

General Distribution of urban population.

42 The detailed statistics for cities and towns, arranged (a) by territorial units and (b) in certain population classes will be found in Imperial Tables IV and V. In those statements civil lines and cantonments which form part of a city or town have been included along with the city or town to which they belong, and the population of the suburbs has also been included in the figures for the city or town. Properly speaking the suburb should have included those areas adjacent to a town over which municipal jurisdiction has been extended, but it is possible that in some cases other areas have been included within the limits of the town which, though not actually within municipal jurisdiction, are within the zone of urbanization. Such cases, however are not of sufficient importance to affect the value of the figures. Out of a total population of 310 millions in the Indian Empire urban statistics were collected for 316 millions and nearly 82½ million persons, or 10·2 per cent., were enumerated in 2 812 cities and towns of all classes. The distribution of the population between towns and villages is shown in Subsidiary Table I at the end of this chapter. The diagram opposite shows the percentage which the urban population bears to the total population in each unit of the Empire, the proportion in the larger units ranging from nearly 23 per cent. in the Bombay Presidency to 3 per cent. in Assam. While any comparison of the total figures of the Indian continent with those of other countries is of little value we may note that, as compared with 23 per cent in the most urbanized unit of the Indian Empire the proportion of the population of England classed as urban is 70 per cent. and of France 44 per cent. The vast population of India is essentially agricultural and rural, town life being to the majority of the people unpopular and artificial. The urban population of a country or tract expands in three ways, (a) by the natural growth of the urban population, (b) by migration from rural to urban areas and (c) by accretions to the urban areas of places with their inhabitants which were previously classed as rural. It is clear therefore that apart from any natural growth in existing towns or any tendency of the population to migrate from the country to the town, there must in an expanding population be a steady increase in the proportion of the urban and a corresponding decrease in that of the rural portion as the larger villages expand and qualify by population or organization to pass over from the rural to the urban category. Similarly if we divide towns as has been done in Imperial Table IV into classes by an arbitrary limit of residents, there must be as the population expands, a steady transfer of places and their inhabitants from the lower to the higher categories, as they pass by natural growth across the population limits which divide the classes. In the table below which computes the urban population as a whole and in the various categories as classified at each different census we are therefore comparing not the populations of the same towns but the number residing in those towns, whatever they were, which fell within certain population limits at the time of the census.

DIAGRAM SHOWING URBAN POPULATION PER CENT IN THE TOTAL POPULATION, 1921



Distribution of Population in groups of Towns according to size and in Rural Territory, 1891 to 1921

Class of places	1921		1911		1901		1891		Per cent of total population			
	Places	Population	Places	Population	Places	Population	Places	Population	1891	1901	1911	1921
1	2	3	4	5	6	7	8	9	10	11	12	13
Total Population	687 935	316,017,751	722 492	313 488,137	730 750	294 317 082	715,059	287 006,054	100 0	100 0	100 0	100 0
Urban Territory	313	3,418,776	150	2,702,063	140	19 00 04	034	17 11 41	10	90	99 1	90
Towns having—												
I 100 000 and over	30	8 211 704	30	7 077 82	31	6 600 837	30	6 173 123	0	22	22	22
II 50 000 to 100 000	4	3 017 40	4	3 010 281	—	3 414 185	48	3 2 177	11	10	12	11
III 20 000 to 50 000	100	5 025 675	180	5 08 044	160	4 004 461	148	4 418 034	18	18	17 1	16
IV 10 000 to 20 000	400	6 209 583	442	6 103 054	471	6 4 730	407	487 983	20	20	22	19
V 5 000 to 10 000	885	6 223 011	817	5 936 17	856	5 938 057	896	6 164 000	20	19	20	21
VI Under 5,000	690	2 731 054	606	2 006 580	569	1 870 46	05	1 642 00	7	0	6	6
Rural Territory	647 635	312 606 975	702 34	337 86 074	730 600	65 116 83	13 9 5	2,9 534 513	89 8	90 0	90 1	90 5

Excluding unclassified encampment and railway population of 1,800 persons

The first point which occurs to the mind from an examination of the statement is that the progress of urbanization in India if there is any progress at all, has been very slow during the last thirty years. It has to be remembered that any comparison with the figures of 1911 is unsatisfactory as plague was prevalent in many towns especially in the Punjab, United Provinces, Central Provinces and Bombay about the time of the Census of 1911 and the temporary loss of population due to migration from the towns during the epidemic was considerable. The whole increase in the last thirty years in the proportion of the urban population is less than 1 per cent and, as we shall see, the real increase is confined within very limited areas. In the report of last census will be found a review of the influences which have in the past determined and maintained the prosperity of the towns in India. Some as the capitals of former ruling dynasties, owed their importance to their position as political centres; others, situated on the great land or water ways, grew up as emporia of trade; others again were established as strategic citadels of defence against hostile raiders. The prosperity of many has varied with the history of the tract in which they are situated, with the changes in administrative organization, the displacements of population, the diversion of trade routes, the growth or decay of harbours, the introduction of railways and the development of communications. But there are two dominant factors which have specially determined the direction and character of urban development during the last twenty years, namely (a) the expansion of trade and commerce and (b) the development of organized industries. It will be observed that the table above shows the distribution of the population at successive censuses in urban areas of different sizes. The percentages in columns 10 to 13 suggest a tendency for the population to congregate in increasing proportion in the cities and larger towns as compared with the towns below 20,000 inhabitants, and this point is further brought out if, as in the table below, we compare the actual growth of the same towns arranged in different classes at successive censuses.

Population of Urban Classes and of Rural Territory as constituted in 1921 and 1911

Class of places	Number of places in 1921	POPULATION		Variation 1911—1921	
		1921	1911	Increase (+), Decrease (—)	Per cent
Total	687,935	316,017,751	313,488,137	+2,529,614	+ 8
Territory Urban in 1921	2,313	32,418,776	29,702,063	+2,716,713	+9 1
Towns having in 1921					
I 100 000 and over	35	8,211,704	7,075,782	+1,135,922	+16 1
II 50 000 to 100,000	54	3,517,749	3 010,281	+507,468	+16 9
III 20,000 to 50,000	100	5,025,675	5,508,944	+416,731	+7 6
IV 10 000 to 20,000	450	6,209,583	6,103,954	+45,629	+7
V 5,000 to 10,000	885	6,223,011	5,936,513	+286,498	+4 8
VI Under 5,000	690	2,331,054	2,006 589	+324,465	+16 2
Territory Rural in 1921	685,622	283,598,975	283,786,074	—187,099	— 1

It will be observed here that while the towns with populations above 50 000 have increased by over 16 per cent. in the last decade the increase has been considerably less in those between 5 000 and 50 000 while the population of the towns between 10 to 20 thousand has not even kept up with the progress of the general population of the country. The significance of these comparisons lies in the strong indication which they give of the gradual decadence of the medium sized country town and the growth of the larger cities and towns under the influence of commercial and industrial development. This is undoubtedly one of the most interesting and important features of the decade. We can study it best in the conditions of the Bombay Presidency and in the eastern Provinces where industrial progress has been most prominent.

43 In the Bombay Presidency the cry is sometimes heard that the people are forsaking the village for the town the figures show a very different condition of affairs. The following table analyses the distribution of the population at the different censuses over places of various sizes in that Presidency

Number per mille enumerated in places of different sizes in the Bombay Presidency

Places.	1872.	1881	1901	1901	1911	1921
Above 100,000	28	43	45	53	80	79
50,000 to 100,000	9	10	12	15	11	12
20,000 to 50,000	25	26	29	27	27	36
10,000 to 20,000	37	33	45	44	24	23
2,000 to 10,000	501	552	213	206	186	183
500 to 2,000			441	417	451	417
Below 500			219	226	222	233
	1 000	1 000	1 000	1 000	1 000	1 000

The figures show that the urbanization of Western India is in reality proceeding very slowly. While the proportions of those residing in the larger cities are increasing the types of places which are losing to the cities are not the smaller villages but the middle sized country towns, and a marked reduction in the class 2 000 to 10 000 in all regions except the Konkan points to the decline of the market town above the Ghats. It is significant that in 1891 out of every thousand persons

City	Proportional population of certain cities in 1872 and 1921 taking 1872 as 100.	
	1872.	1921.
Bombay	100	182
Ahmedabad	100	213
Kanah	100	232
Poona	100	171
Roorh	100	100
Balepur	100	224
Itan	100	182

859 lived in places below 2,000 inhabitants, and the corresponding figure for 1921 is 650. The small village has thus not appreciably lost ground in thirty years. Industrial and commercial activity is of course the key note of the great increase in the population of the large cities of Bombay shown in the marginal statement and it is these factors which determine the distribution between the progressive, stationary or decadent towns, except where as in the worst influenza areas of the Deccan, the progress of the urban population has been set back by the ravages of the epidemic.

Except for a few progressive railway centres the importance of Bombay urban life lies largely in the development of its cities about which some further discussion will be found later on.

44 In Bengal the influence of the industrial factor on urbanization is, though on a smaller scale than in Bombay even more marked. The population of the Presidency is essentially rural and what towns there are contain a high proportion of foreigners. The proportion of the urban population has grown from 5.3 per cent. in 1872 to 6.7 per cent. in 1901 the rate of progress following closely that of the general population though it has generally been some 4 per cent. greater in the towns. As there are no residential villages properly speaking in Bengal so there are no towns of the smaller class and the population has a decided tendency to congregate in towns of more than 20,000 inhabitants. Calcutta with its suburbs and Howrah



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has 1,327,547 inhabitants and is the centre of commercial activity in the east of India. The city has increased by 43 per cent during the decade and by 60 per cent since 1881. Dacca the only other large city of Bengal, with 119,450 souls, has shared the enormous prosperity of Eastern Bengal and augmented its population since 1872 by over 74 per cent and in the last decade by 10 per cent. The other towns of the Province vary considerably in character but can be divided into two classes. On the one hand there are the country towns with no organised industry and only local importance in trade, which serve the country round with cloth, salt, kerosene oil and such other commodities as the rural population requires and cannot obtain from the land. To this category belong most of the headquarters of districts and sub-divisions and places of historical interest like Murshidabad, Old Mulda, Nadia and others less famous. On the other hand, there are towns which have sprung up as the centres of industry or commerce, such as the mill municipalities up and down the Hooghly, the railway centres and the centres of the jute collecting trade. The progress of these two classes of towns in Bengal is given in the statement below —

Towns in Bengal	POPULATION						PERCENTAGE OF VARIATION				
							Increase (+) decrease (—)				
	1921	1911	1901	1891	1881	1872	1911 1921	1901 1911	1891 1901	1881 1891	1872 1881
The average country town	17,860	11,587	13,034	13,029	12,798	11,523	+2.0	+4.2		+1.8	—5.1
The average industrial or commercial town	30,846	28,888	22,199	20,009	17,233	18,742	+6.8	—30.1	+10.0	+16.1	—8.1

The average country town has hardly grown at all in half a century and is much smaller than the average town which is its nearest counterpart in Europe. The typical industrial and commercial centre is more than twice as large as the average country town in Bengal and has grown rapidly since 1881. These two classes of urban areas differ from one another in every essential respect, in sex proportions, in age constitution and in the sources from which their population is drawn. Dealing at present with the last point only it appears that the bulk of the population of the country towns was born either in the towns themselves or in the adjoining district. Rather less than half the population of Calcutta was born close to its present residence. In the case of the mill towns the proportion is reduced to almost one-fifth. Only 8 per cent of the people of the country towns were born outside Bengal, the proportion in the case of Calcutta is about one-third, but in the case of the mill towns it is considerably over two-thirds and in Titagarh no less than 90 per cent were born outside Bengal. These statistics are significant of the extent to which the industrial labour of Bengal is drawn from outside the province, a point which will be further discussed in Chapter III.

45 A similar phenomenon is seen in the case of the town of Jamshedpur in Bihar and Orissa, the headquarters of the Tata Steel and Iron industrial area in the Province. This town has risen from a village of less than 6,000 at the beginning of the decade to an industrial town of over 57,000 at the time of the census. Here the foreign population runs as high as 724 per mille, a considerable number of the inhabitants being Chamar labourers from the Chhattisgarh tracts of the Central Provinces. The town has an efficient municipal authority and the workmen are housed in up-to-date model dwellings. The development of the scattered coal areas has not yet resulted in urban concentration owing largely to the fluid nature of the labour employed, and when we pass beyond the areas where the industrial factors are dominant the influences which control the progress of the urban population become more varied and complex. Bihar and Orissa is essentially a rural province. The urban population, which is 37 per mille at the present census, has only increased by 3 per mille in the last thirty years. Most of the towns considered individually are actually on the decrease and the aggregate increase for all the towns is less than the increase in Jamshedpur

has 1,3517 inhabitants. The city has increased since 1881. Dacca shares the enormous population since 1872 by over other towns of the Province. On the one hand and to the disturbance created in the normal distribution of industry and only local salt, kerosine, and other necessities of daily life are required and cannot be produced in the vicinity of the headquarters of districts. The population of certain towns at one census with that of preceding censuses shows that the population of these towns has increased since 1891 in Rajputana. The ancient and picturesque city of Ahmedabad is the chief railway centre of Rajputana, has increased in its population for the last forty years, though the figure returned at the last census was swelled by the temporary congregation of pilgrims for the Urs of the Jute collecting. The enumeration of Indore is now a flourishing industrial and commercial centre in the state and is expanding rapidly, while for the same reason the population of the capital of the Gwalior State is steadily rising. On the other hand, the cities which have neither trade nor industry of importance have declined. In the provinces, the cities of Nagpur and Jubbulpore are industrial towns, both increased in size. Otherwise there is little real urbanization except in the cotton tracts of the Maratha plain in Berar, where the population congregates round the cotton mills and markets. In this proportion of the urban population is 9 per cent, but the apparent increase of 14 per mille in the last decade is fictitious as the real condition in the towns is indicated by plague.

Towns in Bengal
The average country town
The average industrial or commercial town
In the Madras Presidency form 12.4 per cent of the population, Madras being second only to Bombay in respect of its urban population. The exception however of a few large places the towns of the province are mostly overgrown villages. There is no tendency in the south

The growth of genuine town life and the increase of 1.7 in the proportion of the population in the decade has not equalled the rate of increase of the population. The principal expansion seems to have been in the towns of between twenty and fifty thousand inhabitants. The East Coast contains the highest proportion of town dwellers and, as has been observed in previous reports, the Tamil is a more frequent town dweller than the Telugu. Among the large cities the populations of Madras and of Madura, which is the seat of an important indigenous dyeing industry, have slightly risen. The population of Trichinopoly has slightly declined. Besides Madura the towns which have increased most in the half-century are Cocanada, Rajahmundry and the latter apparently reached its limit of expansion in 1911, the population on the other hand has shown consistent growth while in the case of the latter the absorption of outlying suburbs appears to be the chief cause of the increase.

Bengal In the Hyderabad State there has been no growth of urbanization in the last forty years and the city of Hyderabad, which is the fourth largest city in the province and contains 404,000 persons, lost nearly a fifth of its population during the decade through plague and malaria. The three cities of the Mysore State, Mysore, the capital, Bangalore, with its important cantonment, and the industrial area of the Kolar Gold Fields, now treated as a "City," have all expanded and the urban population of the State now stands at a proportion of 14.4 per cent, an increase of nearly 2 per cent since 1891. In the Travancore State the considerable increase of 4.1 in the proportion of town dwellers is almost entirely due to the addition of twenty-seven new places at the present census to the list of towns. Quilon, an important commercial and industrial town, has added a third to its population and Trivandrum the capital has developed during the decade at a rate slightly above that of the country round it.

50 Seventy-nine places were classed as census towns in Burma in the present census. Of these twenty-four are "Major" towns having a population exceeding 10,000 and fifty-five are "Minor" towns belonging to the classes either below 5,000 or between 5,000 and 10,000. Of the major towns the eight largest are sea-port towns and the other sixteen trading centres, while most of the minor towns also owe their growth and importance to trade. About 10 per cent of the population live in towns.

Central India,
Gwalior, Rajputana
and C. P. & Berar

Hyderabad, Mysore
and Travancore

Burma

making the comforts of home life, exposed to the greatest temptation towards intemperance, and ambitious, so far as they have any ambition, only to earn enough to take them home. It is not surprising that their employers find they have little heart in their work and that they are notoriously unsteady. Similar conditions obtain in Rangoon, whose cosmopolitan population has a sex ratio of 414 females per 1 000 men and contrasts conspicuously with that of the resident Burmese town of Mandalay where there are as many as 915 women to every 1 000 men. Though the industrial towns of the Bombay Presidency have a large foreign population immigrant labour is of a more permanent nature than in the eastern industrial tracts and there is more employment for women. Bombay itself has 524 females per 1 000 males and the ratio in Karachi is 629 in Ahmedabad 703 and in Sholapur 894 all these except the last having cantonments within their area.

Cities

53 As has already been explained, no precise definition of City was prescribed. All towns of 100 000 inhabitants or more were, *spao facto* called cities but local authorities sometimes also added certain other large towns to the number in this category. Some statistical information for the 33 largest cities of India which have 100 000 or more inhabitants is given in the statement below.

City	Population 1911	Year of previous census	Number of houses per 1,000 males	Proportion of population living in houses per 1,000 males	PERCENTAGE OF ANNUAL INCREASE (+) & DECREASE (-)					
					1911-01	1901-11	1891-01	1881-91	1871-81	1871-91
	1	2	3	4	5	6	7	8	9	10
Calcutta with suburbs and Township	1,217,547	21,418	800	628	+4.8	+11	+23	+15.5	204	unavailable
Bombay	1,175,91	148,888	136	940	+20.1	+20.8	+1.3	+	+20.0	+23.3
Madrass and Cantonment	4,28,82	24,180	800	330	+0	+1.8	+1.3	+11	+7	+21.2
Hyderabad and Cantonment	674,127	1,320	800	575	-1.9	+11.0	+5	+13	+	+20.0
Madras and Cantonment	811,882	1,370	441	373	+	+	+10.5	+13.0	+24	+21.8
Trichinopoly and Cantonment	284,153	17,482	675	480	+12	+12.0	+	+11.1	+	+7.8
Allahabad and Cantonment	571,71	1,711	478	377	+10	+11.0	+1.0	+11.1	+	+11.1
Amritsar and Cantonment	375,987	14,990	723	607	+12	+12.0	+	+11.1	+	+11.1
Lucknow and Cantonment	50,588	1,380	77	323	-4.5	-1.1	+	+4.4	+	+
Bombay	807,486	20,821	802	340	+10	+11	+10	+10	+10	+10
Trichinopoly and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Calcutta and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Trichinopoly and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Bombay and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Trichinopoly and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Amritsar and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Allahabad and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Calcutta and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Trichinopoly and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Amritsar and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Allahabad and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Calcutta and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Trichinopoly and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Amritsar and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Allahabad and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Calcutta and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Trichinopoly and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Amritsar and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Allahabad and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Calcutta and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Trichinopoly and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
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Calcutta and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
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Amritsar and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Allahabad and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
Calcutta and Cantonment	218,888	1,711	675	480	+12	+12.0	+	+11.1	+	+11.1
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held to extend is always a matter of some difficulty to determine. To the south and west and east the limit of the suburban area of Calcutta is clearly defined, to the north the line of both banks of the Hooghly is parcelled out among a series of municipalities extending almost without a break over twenty miles, and in some sense all these municipalities are suburban to Calcutta. It is usual however to take the boundaries of Cossipore, Chitpur and Howrah as the suburban limits, and Calcutta city, surrounded by the six suburban municipalities, forms a compact block for which it is convenient to have comprehensive figures. The area covered by Calcutta and its suburbs is about 62 square miles, the area of the river Hooghly being left out of account, and its population enumerated at the recent census was 1,327,547 persons. Dealing with the complaint, made by some of the local newspapers after the census and taken up by the Calcutta Corporation, that the census of Calcutta had been incomplete Mr Thompson writes —

“The difficulty experienced in obtaining the willing service of a sufficient number to act as enumerators was somewhat more acute than on former occasions. This was partly a reflection of the spirit of the times, but was aggravated by the fact that the assistance given by the employés of the Corporation was disappointing. The difficulty caused some anxiety and was not overcome until rather late in the day, but there was no sort of breakdown anywhere in the arrangements and the final enumeration went with a good swing. The same cry has been raised after each successive census since 1872. A fresh census four years after that of 1872 showed that the original estimate had probably been an over-estimate rather than an under-estimate, and in 1911 an elaborate investigation immediately after the enumeration proved the scent false. On the present occasion it was immediately seen that the decreases in population in certain localities, which had been the subject of criticism as soon as the results were published, appeared just where the Improvement Trust and the Corporation had been most active in clearing sites for improvements, and the Port Trust had made its extensive acquisitions for the new King George Dock. Critics, moreover, failed to notice that the decrease in the Port population, the result of stagnation in the export trade, had been responsible for bringing down the city population by $1\frac{1}{2}$ per cent, nor did they appreciate the significance of the great increase of suburban passenger traffic on the railways of recent years, which shows to what an extent Calcutta's workers have overflowed beyond its immediate suburbs. There were omissions in the European quarters which may have amounted to 800, but there is little doubt that omissions in Indian quarters were very few, and the total population may be taken as certainly correct within 2 per mille and probably within 1 per mille.”

The increase in the population of Calcutta and its suburbs was 11 per cent in the decade 1901-1911 and 4.3 per cent in the recent decade. The increase in Bombay in the same period is considerably larger than that in Calcutta, where, however, the population has been able to spread to the suburbs in a manner in which that of Bombay with its island situation cannot. There are few large mills and factories in Calcutta itself such as there are in Bombay, and the industrial population is spread along the river for some distance beyond the suburbs, so that Calcutta as a centre of population is still nearly twice as great as Bombay. The average density of the population of the city and suburbs is 34 persons to the acre and of the city alone 69. The density of the population of the county of London is 63 per acre, but on the one hand there is no part of London where the density is much more than half that in the Jorasanko ward in Calcutta nor, on the other, does London contain any area, bearing so large a proportion of the whole, which has so low a density of population as Ballygunj.

A feature of the recent decade is the increase in the population of the suburban areas as indicated in the table below —

Census of	Calcutta with suburbs, the Fort, the Port and canals.		Calcutta Municipal area.		Suburbs in the 24 Parganas		Howrah	
	Population	Variation per cent in previous decade	Population	Variation per cent in previous decade	Population	Variation per cent in previous decade	Population	Variation per cent in previous decade
1	2	3	4	5	6	7	8	9
1881	829,197		577,761	—5.6	126,077		90,813	+8.0
1891	932,440	+12.5	649,095	+12.5	133,529	+5.9	116,606	+28.4
1901	1,145,933	+22.9	810,251	+24.7	140,543	+5.3	157,594	+35.2
1911	1,272,279	+11.0	861,501	+6.3	197,206	+40.3	179,006	+13.6
1921	1,327,547	+4.3	885,815	+2.8	224,395	+13.8	195,301	+9.1

Many thousands of clerks and others now live outside the city areas and come in daily to their work in the city and the total number of season ticket holders is nearly three times as many as it was ten years ago. Though much has been done to improve the communications between the city and suburban areas, much still remains, and in spite of the operations of the City Improvement Trust who have acquired and cleared within municipal limits nearly 800 acres, or 7 per cent. of the total area of the city there are localities in Bara Bazar Bow Bazar Bentinck Street and Dharamtala where the Marwari community Chinese Anglo-Indians and others live under conditions of overcrowding unimagined until they have been witnessed. Yet overcrowding is, by no means, so serious a problem in Calcutta as it is in Bombay or in the centres of many much smaller cities in India. Like most large commercial and industrial cities the ratio of females to males is low in Calcutta. The city has 470 females per thousand males, the suburbs having rather a larger proportion. The low sex ratio is closely connected with the large proportion of foreign-born in the Calcutta population. Calcutta city is the birthplace of only 335 per mille of its inhabitants and by no means all of these belong to families domiciled in Calcutta. It is estimated that the number of permanent inhabitants of Calcutta who look upon the city as their home is probably not more than a quarter of the population. The city is, of course, a centre of concentration of population from the areas around it, but besides those born in the Province of Bengal there is a large foreign influx. The Province of Bihar and Orissa itself supplies nearly 1 in 5 of the Calcutta population a number greater than that which comes from the whole of the rest of Bengal outside the city and the two adjoining districts. Of these immigrants, of whom about a quarter come from Orissa, the bulk are men engaged in some form of manual labour women being fewer than one to every five males. The United Provinces contribute nearly 1 in 10 of the Calcutta population these immigrants engage in the same pursuits as those from Bihar but a large proportion are in regular as opposed to casual employment and probably for this reason the sex ratio among them is higher. As many as 23 per mille in Calcutta were born in Rajputana and represent the Marwaris—a rather loose term—who absorb so much of the piece-goods trade and are brokers in other commodities and their clerks and servants. A feature of the population in Calcutta is its constantly changing nature. It is safe to say that a great majority of immigrants do not come to stay and as one temporary wave of immigrants waxes and passes, their places are taken by others either from the same or some other direction. The great increase in the number of immigrants from Rajputana and Bombay of recent years, who are mainly of the mercantile class seems to show that Calcutta's importance as a business centre has, in no wise, been diminished by the withdrawal from it of the headquarters of the Government of India. Nearly 71 per cent. of the population of the city and suburbs are Hindu, 24½ per cent. Muhammadan and 3½ per cent. Christian. The proportion of Muhammadans has lately decreased especially within the last decade, and a curious feature of recent years, which the census figures suggest is a progressive tendency towards the segregation of the two main communities, chiefly by a drawing apart of the Hindu majority from the rest of the community and the reduction of small minorities of Muhammadans in the northern end of the town and in other quarters where Hindus were most numerous.

55. The marginal table gives the area and population of the City of Bombay at the last six censuses. The figures of the last two censuses are disturbed by the prevalence in the city of plague which caused considerable temporary emigration.

Census of	Area in Acres	Population
1872	11,820	644,401
1881	14,278	772,186
1901	14,760	8,17,764
1901	14,312	774,808
1911	14,276	879,442
1931	15,004	1,175,914

A census taken in 1906 by the municipality gave a population greater by more than 200,000 persons than the population of the preceding decennial Census of 1901. The decade 1901-1911 was not a period of active growth in the city of Bombay and the actual increase allowing for the disturbance of plague, was not considerable. In the past decade the vital statistics show a steady excess of deaths over births in each year but registration is known to be defective and little inference can be drawn from these figures. In the epidemic period 1918-1920 the city lost, according to the vital statistics

records, no less than a hundred thousand lives by excess of deaths over the average mortality and it is clear that influenza, though most virulent in its effects in 1918, persisted in the city areas well into the succeeding year. There is, of course, a steady flow of immigrants into the city and it appears to be probable that, though the population of the city reached a million soon after the Census of 1911, the chief increase from immigration took place in the last three or four years of the decade. Hindus who naturally form the bulk of the population have increased at a greater rate than any other community. The number of Muhammadans has declined. The Parsis, though numerically few, form an important portion of the population of the city. The Jain population fluctuates in much the same proportion as in the Presidency generally and the strength of the Christian population, which lies between 5 and 6 per cent in the city, varies with the changes in the European element. The disparity in the sexes has steadily increased in the last fifty years owing to the constant influx of the foreign element into the population, the sex ratio stands now at about two males to one female. The small settled residential communities of Parsis and Jews have a fairly normal family constitution and the proportion of females is higher in the Hindu community than amongst Muhammadans, Christians or Jains, indicating a more settled element. Probably the most interesting feature of the population of Bombay is the nature and variation of its large foreign element. The marginal table gives the percentage of persons born in Bombay

Percentage of native population

1872	31.1
1881	27.8
1901	25.0
1901	23.4
1911	19.6
1921	16.0

at each of the last six censuses. A large proportion of the immigrants come from contiguous or neighbouring districts of the Presidency, the district of Thana, for example, was supplying Bombay with a substantial stream of immigrants as early as 1881 and probably even earlier. It is probable that the Cutchi immigrants, who are mainly traders—Bhatias, Khojas, Vanis and so on, came to Bombay in large numbers in the great trade boom in the sixties and that the maximum immigration of these people was then reached. Poona has naturally always been a great source of Bombay immigration but the stream has increased but little since 1881. The same applies to Surat. The Baroda stream is not as large now as in 1891, such persons from there as want employment in the mills going to Ahmedabad. The stream from Ahmednagar and Nasik shows a sudden increase at this census, and more important still is the growth of the stream from the Punjab and Northern India. The permanence or otherwise of any flow of immigration is ordinarily indicated by the sex ratios. We have seen that in Bombay, as a whole, the ratio of females to a thousand males is 524, in the Bombay born population it is, as will be expected, much higher, namely 785. The sex ratios in the case of immigrants from Ahmednagar, Nasik and Poona are 785, 765 and 716, respectively, showing that the bulk of these immigrants have brought their wives with them, a fact which may be due to either of two causes (1) that they have come to settle permanently or (2) that the conditions were so bad in their villages that they had no option in the matter. When we come to the immigrants from more distant areas the matter is different. The ratio of females amongst immigrants from the Punjab is 199 per thousand, of those from the United Provinces 167 and of those from Rajputana 154, and as the age-groups of these foreign populations show that the bulk of them lie between the ages of 15 and 40, we have the same abnormal conditions in the Bombay industrial population as have already formed the subject of comment in connection with the population of the industrial towns in Bengal. An interesting feature brought out by a scrutiny of the caste of recent immigrants, especially those from Ahmednagar who are in particularly large numbers in the last decade, is the number of Mahars. There appears to be a drifting into Bombay of all the great Mahai castes from the Marathi speaking districts, and especially from the Deccan. Marathas also form a considerable proportion of the immigrants and the majority of them, as well as of the lower castes, work in industrial occupations or as labourers, while the occupations under the head "Public Force and Administration" are largely supplied by the residents of the Punjab and the United Provinces.

56 Of the other large cities of Bombay, the growth of the population in Karachi, Ahmedabad and Sholapur is the most conspicuous. The population of Ahmedabad is not so cosmopolitan as that of Bombay, the proportion of foreigners being 397 per mille. A considerable proportion of the foreign element comes from

Other cities of the Bombay Presidency

Baroda, Rajputana and Kathiawar and the movements and changes in the sex distribution in the last fifty years, which are given in the margin, illustrate in an interesting manner the rapid industrialization of the city. Of the total population no less than 514 per mille are engaged in industrial occupations and 205 in trade.

*Number of Females per 1,000 Males—
Ahmedabad City.*

1861	1,010
1881	937
1901	918
1911	848
1921	708

About a third of the whole population is supported by the cotton industry. The growth in the city of Karachi during the last decades of considerable interest the population at the present time being 216 888. The city population is almost as cosmopolitan as that of Bombay the foreign element being 605 in every thousand. The Hindu and Muhammadan element in the population is about equal and together forms 927 per thousand of the inhabitants, the proportion of Christians being 44 per mille. Besides Cutch, Kathiawar and the various districts of Sind there is a considerable immigration from Baluchistan, the Punjab and Delhi and the United Provinces the proportion in the city population of females is 629 per mille and an important feature is the small number of women among the working population, a feature common to the whole of Sind. Karachi is not essentially an industrial city the population in organised industrial concerns being about a fifth of that in Ahmedabad.

Madras.

57 Next in population to Calcutta and Bombay comes the city of Madras

Decade	Increase in population	
	Actual	Per cent.
1872—81	8,500	+ 5.1
1881—91	48,870	+11.4
1891—01	68,838	+13.6
1901—11	9,314	+1.6
1911—21	8,231	+1.6

with a population of 526 911 persons. Madras has few organized industries and, apart from its position as the headquarters of the Government of Madras, it gains its chief importance as a sea port and a distributing centre. The density of the population is as high as 161 persons per acre in the heart of George-town and as low as 2 persons per acre in Fort St. George, which includes many office buildings and unoccupied spaces. The variation of population of Madras is shown in the marginal statement. Madras city has the unenviable notoriety of having a higher death-rate than any district of the Presidency during the past ten years the number of deaths in the city has exceeded the number of births by no less than 22,963 or 11.7 per cent. Thus the increase of population recorded at the census is due entirely to immigration. Only one-third of the population of the city however is foreign-born and of these only 11.3 per cent have come from beyond the limits of the Madras Presidency the large majority are residents of the four districts in the immediate vicinity of the city. The number of females per 1 000 males in the city population is as high as 908.

Delhi.

58 The area covered by the City of Delhi, the present capital of India

	1821.	1911.
DELHI CITY	304,450	322,837
Metropolis	218,209	229,144
Imperial Delhi	31,436	
Old Cant. masonry	1,127	2,002
New Cantonment	8,573	
Civil Lines	17,208	

and its cantonments is 63 square miles and the population enumerated at the recent census was 304 420 persons. The first regular census of the city in 1881 showed a population of 173,303. A gain of 11.1 per cent. was recorded in 1891 but the rate of increase dropped to 8.3 per cent. in the succeeding decade, though it rose again in 1911 to 11.0 per cent. The remarkable increase of 30.7 per cent. disclosed in the present census is mainly due to the expansion of urban area owing to the transfer of the capital by virtue of which as will appear from the marginal statement, the city added about 55 000 souls to its population. The density per square mile is 4 663 and there are on the average 4 persons in a house. Vital statistics for the whole decade are not available but, such as they are they show an excess of about 17 000 births over deaths. In 1918 owing to influenza the number of deaths rose to 39 000 which was more than three times the normal rate but even this high mortality does not appear to have made a visible impression on the growth of the population. The proportion of foreigners in the population is 430 per mille the largest contributions being 57 000 from the United Provinces 38 000 from the Punjab and 31 000 from the Rajputana Agency. Most of the immigrants leave their families at home and thus females are, as usual in urban areas, in marked deficit in the city the ratio standing at about 2 males to

one female Of the inhabitants more than half are Hindus, 30 per cent Musalmans and 3 per cent Christians, the other religions being numerically unimportant

59 In certain cities enquiries were made, by means of special schedules designed for the purpose, into the question of the pressure of population on housing and room space For the detailed result of these enquiries the reports of the cities must be consulted They can only be briefly mentioned here The density of the city of Bombay is 78 persons per acre compared with 60 persons in the administrative county of London The figure means little in an area where highly congested areas and large open vacant spaces are both to be found, but it is undeniable

Pressure of population on space

Class of tenement by number of rooms	PERCENTAGE OF EACH CLASS OF TENEMENT TO TOTAL TENEMENTS		PERCENTAGE OF OCCUPANTS OF EACH CLASS OF TENEMENT TO TOTAL OCCUPANTS.		AVERAGE NUMBER OF PERSONS PER ROOM IN EACH CLASS OF TENEMENT	
	London 1911	Bombay 1921	London 1911	Bombay 1921	London 1911	Bombay 1921
1 room	13	70	6	66	1.92	4.03
2 rooms	19	14	15	14	1.71	2.11
3 rooms	21	7	20	8	1.37	1.00
4 rooms	16	4	17	5	1.19	1.30
5 rooms	9	3	11	4	1.03	1.00
6 rooms and over	21	2	25	3		

that the central portions of the city are far more crowded than is compatible with sanitation, and it seems that after a decline in density since 1881 they have begun to fill up again recently The marginal table gives some indication of the pressure of population on house and room space in Bombay as compared with that of London in

1911 It will be seen that the conditions of overcrowding in Bombay are far worse than in London In the worst section of Bombay, the Sewri section, no less than 96 per cent of the population live in one roomed tenements with five persons per room In Karachi the overcrowding is even worse than in Bombay, the percentage of persons living in rooms occupied by 6-9 and 10-19 persons being 32.3 and 12.4 there against 22.1 and 10.8 in Bombay In Ahmedabad conditions are better than in Bombay, the average number both of one room tenements and occupants per room being less, but even Ahmedabad is much more overcrowded than London

The enquiry was not undertaken in Calcutta in the recent census as the Corporation had other sources of information The overcrowding in parts of the central wards of the city has already been commented on In Rangoon there is undoubted congestion of population at certain times of the year, notably in February and March when the seasonal wave of immigrant labourers is at its height The conditions, however, are well known to the administrative authorities and it was considered useless to attempt any enquiry in connection with the census The household enquiry in some of the Punjab cities has yielded figures which, when compared with those of the population census, appear to be of somewhat doubtful trustworthiness The results however so far as the pressure of population in room space is concerned are given below —

City	PERCENTAGE OF EACH CLASS OF TENEMENT TO TOTAL TENEMENTS						PERCENTAGE OF BUILDINGS WITH AN AVERAGE PER INHABITED ROOM OF					
	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms and over	2 persons or less	Between 2 and 4 persons	Between 3 and 4 persons	Between 4 and 5 persons	More than 5 persons	
Lahore City	38	27	13	9	4	9	50	18	12	7	13	
Lahore City (excluding Civil Station)	29	32	16	10	5	8	51	18	11	7	13	
Lahore Civil Station	54	17	9	6	3	11	47	20	14	7	12	
Amritsar City	17	35	20	14	7	7	70	14	7	3	6	
Jullundur City	44	31	11	5	3	6	64	19	9	4	4	
Rawalpindi City	36	27	16	9	5	7	60	18	11	5	6	

CITY.	Places found in particular in India				
	One person.	Two persons.	Three persons.	Four persons.	5 persons and over.
Delhi	24	27	77	30	22
Calcutta	24	27		22	21

The results in the case of three cities of the United Provinces of Agra and Oudh are given in the marginal table.

Rural Areas

60 In Imperial Table III statistics are given of the distribution of the rural population in places of different sizes, and in Table I at the end of this chapter the same distribution is shown by means of proportionate figures for each territorial unit. It has been usual in previous census reports to discuss these figures in some detail and to attempt to show from them how the rural population of India is distributed over villages of different sizes in different regions of the country. I do not propose to revive this discussion on the present occasion. The census statistics rest on the returns of the number of persons residing in villages and from the point of view of census enumeration it would seem essential that the ultimate territorial unit should be a unit based on an aggregation of population. Unfortunately in large parts of India the village does not correspond to this description. Over a considerable area of the country villages are not units of residence but arbitrary and irregular units of area into which the country has been divided for the purposes of the administration of land revenue they correspond in a certain degree to the civil parish in England, but have little demographic interest. The revenue surveys which determine the boundaries of villages date back in the case of Bengal to as early as 1838. Mr Tallents observes of the villages in Bihar and Orissa—

"The village (mauza) boundaries were demarcated by an official called the superintendent of survey, and maps were prepared accordingly by the revenue surveyor who was also responsible for demarcating the estates of revenue-paying proprietors. Owing to want of clearness in the instructions and the various ways in which they were interpreted there was much confusion between the estate and the *mauza* which in some cases was continuous with the estate, in others formed part of an estate and in others again included several estates. In the districts to which the operations were first extended it appears to have been the intention to include all the lands of particular estate, wherever situated, in the *mauza* in which most of the estate lay and in these districts it is not uncommon to find revenue survey *mauzas* which include five or six insignificant parcels of ground separated from each other by several miles. This desire to identify the *mauza* with the estate also resulted in some cases in a number of what would ordinarily be considered villages being included in a single *mauza*. Towards the end of the operations ideas changed and there was a tendency to treat as *mauzas* groups of cultivated holdings usually with a central site for dwelling houses and sometimes with waste land attached without reference to the boundaries of the estates.

Since the earlier surveys there have been subsequent revisions, in which the village boundaries were modified with a view to simplifying the basis of revenue administration to which the circumstances of residence were subordinated. In fact in large parts of Bengal where owing to the peculiar configuration of the country the houses are scattered over the face of the country without any reference to civic unity or corporate life, there is practically nothing which corresponds to a village in the ordinary sense of the word and the *mauza* which is for convenience's sake translated as a village is merely that tract of land, inhabited or not which has been demarcated as a unit for revenue purposes. In the Punjab the village has had a somewhat similar history: the present village areas being the result, modified by various revisions, of the old survey based on the then existing estates. Throughout the northern central and western tracts of India, however there is, as a rule considerably more correspondence between the unit of area and the unit of residence than in the eastern provinces. Unlike the Bengali the upcountry peasant is distinctly gregarious. Partly on this account, and very largely owing to the necessity in unsettled times of combination against hostile attacks, the village in the north west of India and throughout the United Provinces and the central tracts of the Deccan has a distinct residential aspect which was to a certain extent considered in determining the unit of revenue administration. Even here however the correspondence may be and very often is, by no means complete. In the hills of the Punjab and United Provinces where difficulties of communication prevent any large aggregate of houses in one place the village in its administrative sense may consist

of a large tract of wasteland with individual houses scattered all over it. 'In the case of Sind the inconsistencies noted above are accentuated. In the Presidency proper the village is possessed of a certain historic interest. The British administration solidified and the survey delimited the distribution of the land, together with other picturesque features such as the hereditary rights of the village officers, in the form in which they were handed down. And for that reason the village, even though consisting in fact of several hamlets, does in most tracts possess an almost indefinable sense of solidarity. In Sind on the other hand the survey was working on a more phant material, and new villages were created as occasion demanded, the artificial and almost purely utilitarian unit of Land Survey collection being for the most part treated as a village at the census. Within this area there may be, and usually are several, sometimes innumerable, separate residential units." Mr Sedgwick, from whom I have just quoted, gives a case of a *Mahal* in the Karachi district which had in 1911 an area of 1,806 square miles, 3,572 occupied houses with a population of 18,483 persons with only two villages, and similar other cases of the same kind, and Mr Tallents observes that in the Monghyr district of Bihar, the size of the *mauza* or revenue village varies between 72,000 acres, the maximum, and a minimum of less than one acre. In Assam there are three distinct village units, one based on the cadastral survey, one on the *gaon* or *gram*, which more nearly resembles a residential unit, and one in the hills which consists usually of a collection of houses and is practically identical with a village in the usual sense of the term. In Madras the classification based on villages is for demographic purposes practically useless, since the meaning of the term differs essentially in the Agency tracts, where the revenue *mauza* has little connection with any form of residential unit, the Deccan tract, where the *mauza* nearly resembles the residential village of central and northern India and the Tamil country and west coast tracts, where the correspondence between a corporate village and a revenue unit varies in different localities. Similar inconsistencies in the meaning of the word occur in Hyderabad State between the western tracts of Marathwara and the south eastern Telugu areas, and in Travancore, though the unit taken was the residential village known as *lala* and *mun* the boundaries are apparently entirely undetermined and it is probably that as a result of recent settlement operations the revenue demarcation will be revised on a completely different basis. It will be seen from the above review that the term village has for the most part an arbitrary connotation which differs enormously in various parts of India. There is no single homogeneous unit which can be described as a village, and while the regional figures are of some local interest as showing the variations in the distribution of the population in the villages considered as local population units, no comparison can be made between such statistics over different parts of India and it is useless on such a basis to attempt any discussion of the general distribution of the rural population in India as a whole. The student who desires to study this question is referred to the provincial reports which describe in greater detail the basis of the distribution of the rural population in the different tracts of each province. All that we can say from an examination of the figures in table, is that, as would be expected, the proportion of population living in small villages is largest in the hilly and backward tracts of the country, such as Kashmir, Baluchistan and the States of Rajputana, Central India, the Central Provinces and Chota Nagpur.

SUBSIDIARY TABLE III

Number per mille of each main Religion who live in Towns.

PROVINCE, STATE OR AGENCY 1	NUMBER PER MILE WHO LIVE IN TOWNS					
	All religions 2	Hindu 3	Jain 4	Parsi 5	Musalman 6	Christian 7
INDIA	102	98	339	871	124	204
Provinces	101	100	398	890	110	249
Ajmer Merwara	333	238	210	1 000	639	893
Assam	23	20	342	438	19	13
Baluchistan	166	678	529	982	84	959
Bengal	68	109	650	934	35	136
Bihar and Orissa	40	37	312	753	80	93
Bombay *	227	212	419	892	240	592
Burma	98	523	608	897	338	213
Central Provinces and Berar	100	94	297	848	120	594
Coorg	54	45	203		177	265
Delhi	624	535	822	1,000	809	600
Madras	125	116	164	906	245	108
North West Frontier Province	149	632	1,000	1,000	103	935
Punjab	107	133	530	986	100	159
United Provinces	106	75	397	946	272	371
States and Agencies	103	92	302	748	211	129
Assam State	208	331	764		86	6
Baluchistan States	24	76			22	133
Baroda State	207	106	406	788	426	271
Bengal States	28	33	609	667	16	58
Bihar and Orissa States	9	10	50		70	1
Bombay States	164	135	306	511	344	289
Central India (Agency)	92	73	311	864	430	728
Central Provinces States	23	27	464	792	217	15
Gwalior State	97	80	250	757	401	837
Hyderabad State	95	69	268	801	311	323
Kashmir State	88	128	994	280	78	553
Madras States	102	101	1,000	1,000	168	89
Cochin	130	115	1,000		176	151
Travancore	101	105	1,000	1,000	175	76
Mysore State	144	121	311	1,000	403	740
Punjab States	87	77	464	424	126	217
Rajputana (Agency)	134	111	280	926	355	587
United Provinces States	101	40	589		324	32

NOTE.—In the above statement "Hindu" means "Hindu Brahmanic" only except in the case of Delhi and the Punjab where Hindu includes Hindu Arya and Hindu Brahmo also

* Excluding Aden.

CHAPTER III

Birthplace

Introductory remarks.

61. The statistics of birthplace were obtained in the census schedule by requiring each person to state the district in which he was born and if he was born outside the province or state of enumeration, to give also the province or state in which his birth-district lies if he was born outside India he should return his native country. The birthplace unit in India therefore was either (a) the British District or (b) the Indian State. The instructions were not always understood or carried out correctly and in a number of cases entries of villages were made which had to be located in the tabulation offices. This could however usually be successfully done and the tables may be accepted as accurate for all practical purposes. In the case of Indian born persons enumerated outside India information has been obtained from British possessions and Dominions and other countries wherever possible, but the numbers of Indian-born persons resident in countries such as Persia, Arabia, Afghanistan, Nepal, Tibet China etc. where no census is taken are unknown. Nor was it possible to hold a census in Mesopotamia though some information obtained from official records will be found in this chapter. In any case the number of Indians resident outside India is negligible for statistical purposes though the information if fully ascertainable would be of considerable general interest. The record of birthplace is the only means which the census gives of estimating two features of considerable demographic interests, viz. (a) the movements of population from one area to another and (b) the number of foreigners (foreign born) in any population unit. That the spatial movements of population are capable of mathematical treatment and subject to certain theoretical laws has been suggested by Mr Jacob in Chapter III of the Punjab Report. Mr Jacob's treatment of the subject is interesting and I believe novel and I have reproduced some of the more striking passages as an appendix to this Report. To whatever causes the territorial movements are due they form a factor in the growth of the population of any particular area and from this point of view have already been appraised and discussed in Chapter I of this report. In this chapter we shall attempt to find some meaning and interest in them rather with reference to the influences political, economic or social which have caused them. Birthplace however is at best a rough means of measuring either the regional movements or the foreign constituents of a population. In any particular instance the place of birth and the place of enumeration may either one or both, be accidental and have no connection with the place of residence or of business, while in any case the line which divides them for census purposes is often an arbitrary one and may have no important relation to either. Were the statistics reinforced by information regarding place of residence they would have more character and significance. It has not, however been considered advisable to attempt to obtain information in the schedules regarding residence because (a) the whole question, as will be seen, affects only a small percentage of the population and (b) it is doubtful whether such information could be accurately obtained owing to the want of precision in the term place of residence. In the case of the nomad peoples of the north west frontier it is obvious that neither in birthplace nor residence can be found a quantitative measure of their nomadism while there is of course an incessant movement of population by road and rail all over the country of which the census can take no cognizance.

Main statistics.

62. The main statistics of birthplace are contained in Imperial Table VI. Of the total enumerated population of the Indian Empire only 603,570 persons were recorded as born in other parts of the world. Of these about four fifths came from Asiatic countries such as Nepal, Afghanistan, China, Siam Ceylon and Arabia and the remainder mostly from Great Britain and other countries of Europe. On the other hand India sends out a number which we are unable to estimate exactly but which may be put down as about 1.7 millions. The numbers therefore who move between India and other countries are for statistical purposes

practically negligible amounting in all to about two million persons. These exterior movements of population are, however of some interest and will be considered later on in this chapter. Some indication of the extent of the movements of population within the Indian Empire so far as the census can record them, will be afforded by the figures in the marginal table. The total number of persons who were born outside the district in which they were enumerated is about 30 millions representing 10 per cent of the population of India. Of this comparatively small number no less than 20 millions were born in districts contiguous to the district of enumeration and represent out of the total number of persons staying on the census night often for unimportant and accidental reasons out of their native home that small proportion which had happened to cross the borders of a district or other birthplace unit. These figures, which are expanded in subsidiary Table III to show the different features in the principal census units, illustrate the home-loving character of the Indian people which is the result of economic and social causes and of the immobility of an agricultural population rooted to the ground, fenced in by caste, language and social customs and filled with an innate dread of change of any kind.

Proportion of persons born (a) in the district where enumerated and (b) elsewhere

Province State or Agency	NUMBER PER 10,000 POPULATION	
	Born in district where enumerated	Born elsewhere
India	9 019	981
Bihar and Orissa	9,075	425
Kashmir State	9 574	426
Hyderabad State	9 417	583
Madras	9 349	651
Rajputana and Ajmer	9 745	655
United Provinces	9 310	690
Bengal	9,233	767
N. W. F. Province	8,969	1,031
Baluchistan	8 977	1 063
C. P. and Berar	8,851	1,149
Burma	8,821	1 176
Mysore State	8,744	1,256
Bombay	8,689	1 311
Punjab	8,603	1 437
Baroda State	8,571	1 469
Assam	8,274	1 766
C. I. and C. W. P.	8 204	1,796
Coorg	7,929	2 071
Sikkim State	7 188	2 812

63 It is convenient to apply the general term "migrant" to those who were born elsewhere than in the district of enumeration and in the same way to distinguish in respect of any area "emigrants" and "immigrants", and it has been usual in past censuses to consider five main forms of "migration" namely—(i) *casual* or the minor movements between neighbouring villages, which may be of a permanent or temporary character and come into our records only when the persons crossed the borders of two birthplace units, (ii) *temporary*, due usually to the migration of coolies to meet the demand for labour on canals, railways and so forth and to journeys on business or in connection with pilgrimages, marriage ceremonies and the like, (iii) *periodic* due to seasonal demands for labour generally for the harvests,* (iv) *semi-permanent*, where the inhabitants of one place earn their living in another but maintain connection with their own homes and ultimately return there, (v) *permanent* usually in the nature of colonization. While it is naturally impossible to isolate the statistics of these various classes of migration some estimate is possible as to their respective importance from (a) the distance between the places of enumeration and birthplace, (b) the proportion of the sexes among the migrants and (c) our general knowledge of the chief territorial movements in different parts of India and the statistical information regarding them which is obtainable from various independent sources.

64 We may deal briefly with the first two classes. The ordinary casual movements across the borders are clearly of no importance, they include temporary visits for family, social or business reasons and probably cancel out in numbers as between province and province. A more permanent form of these short distance movements is due to the well-known customs, widespread throughout India, by which (a) a man seeks a wife in a village other than his own and (b) a woman goes back to her parents' house when she is about to give birth to a child. In both such cases it is obvious that, where a district border is crossed and recrossed, both the wife and the children will frequently have been born outside the district in which they were enumerated. Here again the exchange between provinces will in many cases work out equally, but not always. The sex statistics, which form a good indication of this matrimonial exchange, show for example that the United Provinces give considerably more women than they receive, while the

* Instances of seasonal migration in other parts of the world are the Italian workers who before the war used to leave their native land for short periods for seasonal employment in Central Europe. South America and elsewhere, the Irish harvesters who came to Great Britain each year, the Aberdeen fisher girls who came to Yarmouth for herring packing, and the great influx of labour into Kent for the hop picking.

reverse is the case in the Punjab. Temporary movements of businessmen, labourers, pilgrims and so forth are continually occurring throughout the year and may cover considerable distances. It is not possible to gauge them nor are they usually worth discussing unless they are so regular as to come under the periodic class. They are, however, often of considerable importance from the point of view of the census organization. While an attempt is made to time the census so as to avoid the principal known festivals and fairs this cannot always be done. The numbers enumerated in Ajmer city included a large concourse of people, many from considerable distances, to the *Urs* festival which was going on at the time, while there were similar gatherings of pilgrims at Puri and some of the other shrines in the United Provinces and Madras. Again, though fortunately the dispersion of the population by plague was not as considerable as in 1911, the disease affected the distribution in certain areas of northern and central India.

65 Just as the shorter movements from district to district recorded by the census cover only a small proportion of the migration describable as casual, so also these same short distance movements include a certain proportion of the other more important classes of migration. Wherever, by nature of commercial industrial or agricultural activity, an area attracts immigrants, a certain portion of these will be drawn from the neighbouring areas. Thus the growth of the larger industrial cities of the Bombay Presidency proceeds largely by concentration of population from the neighbouring areas. Similarly the increasing population of the canal colonies of the Punjab includes thousands of agriculturists from the neighbouring districts, while the flow of settlers from the Santal Parganas into the neighbouring districts of Bengal, the influx of industrial labour into the mining areas of Bengal and Bihar and Orissa and many similar streams of permanent, semi-permanent and periodic migration are included in the statistics of transit between contiguous districts and can only be distinguished from the more casual and accidental movements by other statistical indications or by our general knowledge.

66 In discussing the more important aspects of the territorial movements the actual volume of the migration is of greater interest than the relation which the volume bears to the population of the Province which gives or receives. The table opposite shows the principal Provinces which gain and which lose on the balance of migration and compares the statistics with those of 1911 in each respect. The figures are also graphically exhibited in the map. It will be convenient to consider first this flow of population within the country and to deal in the first place with the case of those provinces which receive population, bearing in mind that the more important movements usually fall under one of the two heads agricultural and industrial. The discussion can here touch only the more salient features of the subject, for further elaboration reference should be made to the provincial reports.

67 Of the larger Provinces and States of India Assam contains the highest percentage of foreigners. Of her enumerated population of nearly eight millions more than $1\frac{1}{4}$ million persons, or over 16 per cent., were recorded as born outside the Province, while of these less than a third were born in districts adjacent to the province, the proportion of females among immigrants of all kinds being higher than in any other province. The indigenous inhabitant of Assam is, like the Bengali, essentially home-loving. Of the small number of 76,000 Assam-born who were enumerated outside the Province the large majority were emigrants of the casual type. If we set against them an equal number of casual immigrants we still have a nett immigration of over a million, representing an important addition to the numbers of the Province a large proportion of which is of a permanent character. This stream of immigrants has been entering Assam for the last fifty years in increasing volume and the children of the permanent settlers have made their home in the province. In an interesting calculation made on the best available information Mr Lloyd estimates that the total population of the province which is foreign or of foreign extraction amounts to at least $1\frac{1}{5}$ th millions of persons, forming 23 per cent. or nearly a quarter of the whole provincial population.

The chief sources of attraction in Assam are twofold (a) the tea garden industry and (b) the cultivable wasteland in the Brahmaputra Valley. The former draws most of its foreign population from the distant provinces of Bihar and Orissa, the Central Provinces, the United Provinces and Madras, while the settlers in the Assam Valley are largely colonists from Mymensingh, Dacca, and

other districts of Eastern Bengal. Both these movements have been very fully dealt with by Mr Lloyd in his report. A third movement of Nepalis into Assam which is chiefly of a pastoral nature is separately described in paragraph 78 below. Regarding tea garden migration Mr Lloyd writes as follows —

"About two-thirds of the Assam tea gardens are in the Brahmaputra Valley and the rest in the Surma Valley. The total population censused on tea gardens was 922,945. This includes managers and assistants, other workers, dependents and the stranger within the gates on census night. The number is about 90,000 less than the total given in the Government returns of immigrant labour. The difference is probably due to many coolies having been out visiting neighbouring villages at census time also to the facts that the labour year does not end in the

Immigrants to Assam and the tea gardens (1911 census)

Birthplace.	1911.		1921.	
	Province of Assam.	The gardens.	Province of Assam.	The gardens.
Bihar and Orissa	271	268	260	232
Bengal	975	98	134	—
Y. Bihar	91	40	77	—
4. United Provinces	34	46	36	—
5. Madras	34	44	29	—
C. I. Agency	78	72	—	—
Rajasthan	14	—	15	—
North of India	—	—	—	—
Outside India	7	—	21	—
TOTAL	1,290	383	363	232

census month of March but in June, and that the Government returns include coal mines, oil fields and sawmills. Lakhimpur (233,000) and Sibsagar (239,000) have the greatest tea garden populations. Then come Sivas (169,000) Cachar (132,000) Darrang (123,000) Nongong (25,000) Kamrup, Goalpara and the two Frontier Tracts have less than 6,000 each. The recruitment of tea garden labourers by contractors has been abolished and the carriers system is now adopted generally. The statement above shows for 1911 and 1921 the number of immigrants in round thousands to Assam as a whole and to the tea gardens only.

For tea, we are concerned chiefly with numbers 1 to 5. It will be noticed that in contrast with the numerous increases from other places, the United Provinces immigrants have decreased both in tea gardens and in the province as a whole, while the Bengal people have decreased in tea gardens, but increased enormously in the province. The United Provinces decrease is shared by all tea districts. It seems to be due to the bad effect of the Assam climate on the immigrants and the increasing preference of managers for Chota Nagpur, Central Provinces, Orissa and Madras coolies. Enquiries show a general opinion that the so-called "jungly" coolies of the Central Provinces and Chota Nagpur (Mundla, Bantala, Gondia, etc.) are the best men for the climate and the work of tea gardens. The United Provinces coolies, it should be noted also, were employed more in the Surma Valley where the slump of 1920 was most severely felt. Bengal supplies a number of the clerical and supervising staff but the loss of about 7,000 natives of Bengal from the gardens represents coolies from Western Bengal districts. This cannot be accounted for except by saying that managers prefer new recruits from Bihar and Orissa and elsewhere. All other provinces contribute great increases to the tea gardens reflecting the boom in the industry in the years previous to 1920. The very large increase from the province of Bihar and Orissa is due mainly to the preference of planters for the men of Chota Nagpur and it may be hoped, to the appreciation by the coolies themselves of the more steady means of subsistence in Assam. I estimate that the total number of foreigners now in the province on account of the tea industry is about a million and a third, that is to say one-sixth of the whole population of Assam. This is only a rough estimate and it is more likely to be under than over-estimated.

The Assam Valley hardly began to attract colonists from outside Assam till the decade 1901 to 1911 and the enumerations previous to that of 1911 show little immigration from across the Bengal border.

"Before 1911 however a change came. The men of Mymensingh began to advance to Assam driven apparently by pressure on the soil at home. They were joined by people of other Eastern Bengal districts, in less numbers. In the Census report of 1911 comment was made on the extraordinary inrush of settlers to the older lands of Goalpara from the Bengal districts of Mymensingh, Pabna, Bogra and Rangpur. At that time few cultivators from Eastern Bengal had got beyond Goalpara, those censused in the other districts of the Brahmaputra Valley numbering only a few thousands and being mostly clerks, traders and professional men. In the last decade the movement has extended far up the Valley and the colonist now form an appreciable element of the population in all the four lower and central districts. In places they have spread inland far from the river. The sex and age figures given in Promotional Table IV show that the colonist are settling by families and not singly. It is reported however that the men generally come first to secure the land and build houses, and the families follow. About 85 per cent. are Muhammadans and 15 per cent. Hindus. In 1911 no special table was prepared, but from the general birthplace table we find that Mymensingh, Rangpur and Jalpaiguri provided 51,000 immigrants to Goalpara and 3,000 to the other five Brahmaputra Valley districts. Comparative figures are available for Dacca, Pabna and Bogra, as they are not contiguous to Assam but the numbers were probably not great. It thus appears that the Eastern Bengal settlers have increased more than

fourfold in the decade to their present total of 258,000 in the Brahmaputra Valley. If we add the children born after arrival in Assam—and there is a goodly proportion of women aged 15 to among the immigrants—the total number of settlers in the valley must come to at least 300,000. In Goalpara nearly 20 per cent of the population is made up of these settlers. The next favourite district is Nowgong, where they form about 11 per cent of the whole population. In Kamrup waste lands are being taken up rapidly, especially in Barpeta subdivision. In Darrang exploration and settlement by the colonists is in an earlier stage, they have not yet penetrated far from the Brahmaputra banks. As shown in the occupation columns of the Provincial Table, only about 30,000 of those born in the named districts of Eastern Bengal are non agriculturists, they are chiefly traders, shopkeepers, timber merchants, clerks, professional men. The remainder over 88 per cent of the total are ordinary cultivators of holdings generally under Government with a sprinkling of field labourers. The few censused in Sibsagar and Lakhimpur are nearly all engaged in trade less than 300 cultivators of the class in question having settled in either district. The reasons given for leaving their home districts in the case of the great mass of the colonists are pressure on the soil, and sometimes actual loss of their lands and even homesteads by diluvion, cheap plentiful and fertile land, with the freedom of a *ryotwari* settlement in Assam in place of expensive and uncomfortable holdings as tenants or under-tenants in Bengal. On first taking up their new lands they sometimes have them cleared of jungle and dug up by hired Nuniya labourers. This and their railway or steamer fares, some house building materials and possibly some land-price paid to local people or unauthorised fees to subordinate revenue officials constitute their only expenses in opening the new life. They erect their own characteristic type of house and their villages can be distinguished at once from those of the Assamese. They are hard working and good cultivators who cannot fail to benefit the country. In Goalpara, Darrang and Nowgong they have produced a great increase in crimes of violence and rioting, in Kamrup some increase, but little in proportion to the numbers.

68 Bengal receives over 1,900,000 immigrants and sends out nearly 700,000 Bengali emigrants, the balance in her favour being therefore considerably over a million. Her foreign-born population forms about 10 per mille of the total population and by far the larger number come from distant tracts. A very rough calculation indicates that the maximum number that can be attributed to casual migration is something less than 30 per cent of the total exchange between districts, while the proportion of casual migration in the exchange between contiguous provinces is probably somewhat less. Of the immigrants by far the largest number (66 per cent) come from Bihar and Orissa. The United Provinces send 18 per cent, Nepal 5 per cent, Assam 4, the Central Provinces about 3 per cent and a smaller number come from Rajputana and Madras. Emigration is chiefly from the eastern districts to Assam and from Chittagong to Burma. The bulk of the foreign-born population is found in the industrial districts of the south of the Province with Calcutta as their centre, in the northern districts of Darjeeling, Jalpaiguri, and the Sikkim State, in the Tripura State to the east and in the Malda and Dinajpur districts in the west. Compared with the figures of 1911 the number of immigrants has slightly decreased while the emigrants are more numerous. An analysis of the statistics indicates that there has been less movement over short distances than in the decade before 1911 and that this decrease in mobility is more marked in the north and east than in the south and west of the province. It is suggested that the more valuable tenure which is obtained under the permanent settlement has served to deter emigration even from districts where there is considerable pressure of population. There is little correlation between migration and density, and the flow of migration in Bengal is largely determined by tendencies which are much older than the last decade and can best be studied with reference to certain definite streams which are based on industrial and agricultural influences. Of these streams the most important are—

- 1 Immigrants into the industrial area round Calcutta from Bihar, Orissa and the eastern districts of the United Provinces
- 2 Immigrants into the districts of Birbhum, Malda, Dinajpur and northern Bengal from the Santal Parganas
- 3 Immigrants into the Darjeeling and Jalpaiguri tea gardens from Chota Nagpur
- 4 Immigrants into the Tripura State from Assam
- 5 Emigrants from Mymensingh and the districts of Eastern Bengal to the Assam Valley
- 6 Emigrants from the Chittagong district to Burma

Of the total population of the four districts of Hooghly, Parganas and Calcutta no less than 841,734 persons, forming

population, were born outside Bengal and an analysis of the figures shows that probably owing to the *sardari* system of recruitment, the great body of the immigrants come from two circumscribed areas, one consisting of the two districts of Outtack and Balasore on the Orissa Coast and the other of the western districts of Bihar with the adjoining districts across the border in the United Provinces. The above areas account for about 553,000 persons enumerated in these four industrial districts or considerably more than one-fourth of the whole number of immigrants to Bengal from outside. Of this large industrial immigration the Superintendent writes as follows —

"Generally speaking the recruits from Orissa find less regular employment than those from the north-west. They are more often casual labourers and are almost all unskilled. More of the Biharis are skilled workmen and the proportion that is skilled seems to increase among those who come from further to the north-west. The number which comes down from the eastern Bihar districts is much smaller and very few come to industrial centres from Chota Nagpur. The aboriginal tribes of this plateau prefer to find work out of doors and about the towns. It is not negated that by any means all those who have come to Hooghly Howrah the 4-Parganas and Calcutta find employment in organised industry. Many of them ply their traditional caste trades in the industrial area as they do also in towns in other parts of Bengal. Muchla and Chamars are cobblers. Goals are milkmen and cartmen. Kahars are pulki bearers and coolies as are Kurmis Bhats Goars, etc.; Kunias are commonly earthworkers. Mallas boat men and so on. Other castes are domestic servants and needy Brahmans from Orissa are found in great numbers in the towns employed as cooks by orthodox Hindus of the higher castes. Chhatras and others of superior cast from Bihar and the United Provinces are constables, *dumras* *Zamindars* peons and the like. Most of the menial staff and porters on the railways come from Bihar and Orissa. Such immigrants are found in considerable numbers all over Bengal, although they are fewer in Tippera, Noakhali, Chittagong, Balasore, Khulna, Jessore and Faridpur than in the rest of the Province. But the abnormally large number of immigrants from Bihar and Orissa and the United Provinces in Calcutta and adjoining districts are mainly attracted by organised industry. Nowhere in Bengal is the Bihari or the Oriya permitted to acquire rights in land and neither is commonly employed as an agricultural labourer. A possible exception to this rule exists in the Dinajpur and Rangpur district where there may have been as many as 30,000 Biharis found employed as field labourers but not more. The rule does not apply to Santals etc. who are willing to take up vacant and comparatively unfertile lands on the outcrops of the old Baramia in North and West Bengal and have been allowed to do so. It goes without saying that immigrants from Bihar and Orissa and the United Provinces include a leaven of the mercantile classes but they do not include any appreciable number employed in the professions or in clerical work."

A comparison between the figures of the last three censuses shows that while the number of foreign born has increased in the other three districts where the bulk of the industries are found, Calcutta which is becoming more of a commercial centre receives now a smaller proportion of the immigrants than in previous decades, while there has been a distinct decrease in the number of emigrants from Bihar and Orissa and the United Provinces who ply their various trades generally throughout Bengal. For the last half century a constant stream of colonists from the Santal Parganas has flowed into the districts of Western and Northern Bengal attracted by the unoccupied land in the *barind* the undulating outcrop of old alluvium in North Bengal. Of the 202,000 Santals enumerated in Bengal 97 per cent. are found in 10 districts of this tract and of these one-third have crossed the Ganges into Northern Bengal. Though there seems to have been some reduction in the numbers enumerated in the Birbhum and Murshidabad districts the numbers in Bardwan where employment is found in the coalfields of Asansol has risen from 6,000 in 1891 to 28,000 in 1901 while in the districts north of the Ganges the increase in the same period is from 48 to 101 thousand. Though the stream still runs strongly the declining rate of increase in the last decade is evidently due to the native-born children of the original settlers having taken the place of their fathers who migrated. The bulk of the labour in the tea gardens of the Jalpaiguri district is made up of aboriginal tribesmen from the Chota Nagpur plateau. By far the largest number (about 120,000) come from the Ranchi district but there is a distinct increase in the numbers from the Central Provinces in the last decade. The equal proportion of the sexes shows that the migration is more or less of a permanent nature the tea gardens finding employment for women as easily as for men. The chief feature of the internal migration in Bengal is a movement of the population of the central belt on the one hand towards the industrial districts round Calcutta and on the other hand, into Northern Bengal and the Assam Valley. The increasing strength of the northward movement across the Ganges indicates the

growing pressure in Central Bengal owing to the decay of the distributary rivers of the Ganges and the consequent deterioration of the productive capacity of the soil. Similarly the pressure in Midnapore already described in Chapter I has found relief by a steady flow of population into the Calcutta and Hooghly districts, the number born in Midnapore and enumerated in the four industrial districts being as high as 114,000 at the present census. The large increase in the population of the Tripura State, amounting to 33 per cent, is due chiefly to immigration from the Tippera district and the Sylhet district of Assam. A strong periodic migration from the eastern districts of Bengal into Burma for the rice harvest will be mentioned in considering the movement of population in that Province.

69 Of every 1,000 persons enumerated in the Bombay Presidency thirty-nine Bombay- were born in other parts of India and two outside India. The actual number of immigrants in thousands was 1,081 and of emigrants 592, giving a balance of gain to the Presidency of 489,000 persons. The exchange with contiguous districts represents about two-thirds of the immigrants and emigrants respectively and in each case the proportion of females is high. The striking feature of the migration statistics in this Province is the increasing absorption of outsiders into the large cities of Bombay, Karachi and Sholapur which, except for the usual exchange of casual migration, practically monopolise the immigrants from outside the Presidency. The mofussil does not attract strangers now any more than forty years ago but the huge industrial expansion in the larger cities has resulted in the concentration to them of population from outside of which the foreigners form a substantial and growing element. The figures are strikingly illustrated by the marginal statement which compares the figures of outsiders in these three cities with that of

Persons born outside the Bombay Presidency enumerated in	1881	1891	1901	1911	1921
	000 omitted				
Bombay Presidency	608	700	671	723	824
Bombay City and Karachi	82	188	137	220	317
and Sholapur Districts	526	512	434	503	507
Rest of the Presidency					

the rest of the Presidency

Writing on the subject of migration Mr Sedgwick says —

“There are thus two chief streams of immigrants which reach us, one from north-west India represented by the huge area of Baluchistan, the North-West Frontier Province, the Punjab, the United Provinces and Rajputana and the other coming from the south-east from Hyderabad and Madras. So far as there is any outward stream it is in a direction moving towards the north-east into Central India, and beyond into Bengal and even to Burma, with a second slighter southern movement into Mysore. But it is believed that while the two streams of emigration are in the nature of casual seasonal labour into cotton lands and the like (though of this there is little actual evidence), the two streams of immigration represent persons in search of work in the cities. The stream from the north goes to swell the proletariat of Bombay and Karachi, and the Hyderabad stream goes to the mills at Sholapur. Only in the cases of Hyderabad and Baroda do the figures both of immigrants and emigrants show an excess of females indicating that the migration is to a considerable extent of the domestic type. This feature would have been expected in the cases of Mysore and Madras also. But males are there in excess in both directions.”

The stream of immigrants from north-western India amounts in the balance to over 350,000 persons, of whom about a third come from the United Provinces, two-fifths from Rajputana and the remainder in somewhat equal proportions from (a) the Punjab and North-West Frontier Province and (b) Baluchistan, the migration from the latter being of course chiefly into Sind. Of the emigrants about 100,000 go to the Central Provinces and Central India, including a stream of periodic labour which goes into Khandesh for the cotton picking and on to the harvests of Berar and Central India, 18,000 to Burma and about 14,000 to the gold fields and coffee plantations of Mysore. The Gujratis and Cutchis are conspicuous among those of the Presidency who are found in the more distant parts of India. Apart from the concentration of population into the industrial cities from every part of Bombay the internal migration presents no features of special interest and can hardly be studied with profit in an abnormal period. The Deccan contributes a larger proportion of its population to Bombay City than any other division and, evidently on account of persistent agricultural depression, has been throwing out population in increasing numbers to other divisions. Periodic migration eastward for the cotton harvests has already been mentioned and a study of some of the areas under irrigation made by the Bombay Superintendent-

shows a natural gravitation of the cultivating population from the less to the more stable agricultural areas. But irrigation is not yet a factor of any considerable importance from this point of view in the Bombay Presidency

P. and Berar.

70 The foreign-born element in the Central Provinces and Berar forms 3.8 per cent. of their total combined strength and of this comparatively small number more than half come from contiguous districts of other provinces and states. The actual volume of immigration and emigration amounts to 610 and 407 thousands respectively but, owing largely to the depressed agricultural conditions at the end of the decade the balance in favour of the province has fallen considerably compared with that of 1911 both by a decrease of immigration and an increase of emigration. Roughly speaking the northern and western tracts of the province attract while the eastern portions throw off population but apart from the domestic and casual exchange on the borders, the vast part of the movement both into and out of the province is of a temporary or periodic or, at most, a semi-permanent nature. The influx of wheat harvesters from the United Provinces and Central India into the Nerbudda valley is a well known periodic movement the volume of which was specially large on the present occasion owing to the lateness of the wheat harvest. The trade and industries of Jabalpur City have attractions for the population of the northern tracts, while there is permanent colonization of the wasteland in the Nimar district, and there seems to have been, during the decade some penetration of permanent settlers from Central India to the Chota Nagpur States attached to the Province. The cotton-growing industry of Berar and of the adjacent districts of the Maratha plain always attracts a seasonal influx from Hyderabad and the Bombay Presidency but many of the guns had closed at the time of the census and the movement on this account was less marked. There can be little permanent agricultural inducement to outsiders in this part of the Province where every available acre is already under cultivation, but the manganese and coal mines offer considerable attraction to labour especially during the off season. In the east of the Province a remarkable feature is the turn of the tide of migration from west to east. In 1911 Bihar and Orissa sent 129 000 persons to the Central Provinces, a figure which dropped in 1921 to 32 000. On the other hand the Chamar of Chhattisgarh who is undoubtedly the most mobile element in the population, has, largely owing to the failure of the rice in that tract at the end of the decade, moved freely to the industrial areas of Bihar and Orissa and Bengal the number enumerated in those provinces being 132 000 or nearly twice the number in 1911. The rice tracts of Chhattisgarh and the Wainganga Valley have been for long one of the favourite haunts of the labour recruiter and Government returns show that the number of labourers who left for Assam from the Central Provinces between 1911 and 1920 was over 93 000 while the census returns show that 91 000 Central Provinces dwellers were enumerated in that province as against 77 000 in 1911.

Punjab.

71 The most interesting feature of the regional movements in the Punjab is the drift of population into the canal areas of Montgomery and Lyallpur. The subject has been already discussed in Chapter I and is dealt with in detail in the Punjab Report. The bulk of these colonists are from the more congested districts of the centre and north of the province a small percentage only amounting to 3 per cent. in Montgomery of the population of the canal area districts being foreign born. On the balance of migration with areas outside it the Punjab gains 174 000 persons. A large proportion of the Indian Army is recruited and stationed in this Province and the figures of migration are therefore affected by the movement of troops. The Sikh contractors, carpenters and workmen of the Punjab are well known throughout India and their enterprise has carried them overseas to Burma the Colonies and America. On the other hand the Hindus and Sikhs obtain their wives largely from outside the province and specially from Rajputana the exchange between other provinces resulting in a gain of 93 000 women as compared with a loss of 34 000 men.

Burma.

72. Of the total immigrant population of 97 000 persons in Burma 573,000 are Indians and 102,000 are Chinese representing 80 per cent. and 15 per cent. respectively of the whole number. Immigrants from both countries have increased since 1911 Indians by 16 per cent. and Chinese by 36 per cent. but in neither case has the increase been as great as in the decade 1901 to 1911 though a curious and undoubtedly satisfactory feature of the recent decade is the larger number of women among the immigrants from India than in previous years, the increase in female

Indian immigrants being 21 per cent against 15 per cent of males. Of the Indian immigrants more than two thirds are Hindus and aboriginals and between one-fourth and one third Muhammadans while there are small numbers of Sikhs, Jains, Aryas and other minor religious classes. The bulk of the Indians come from Madras (273 000) Bengal (116 000) and the United Provinces (71 000). The Punjab, Bombay States and Rajputana also send over contingents. In Madras the Agency tracts especially the districts of Gargam, Vizagapatam and Godavari supply most of the Telugus while the Tamils come chiefly from Ramnad and Panjore. By far the majority of the Bengali immigrants come from the Chittagong tracts adjoining Burma but Calcutta with its surrounding areas supplies over 11 000. The Lychnid and Sultanpur districts send the majority of those who have recorded the United Provinces as their birthplace. Apart from the immigrants from the border districts of Chittagong and Assam who when they are not merely of the casual class are mostly labourers in for the harvest the bulk of the foreign population consists of employees of the various industries in and around Rangoon and elsewhere. It is difficult to form any estimate of the permanence of this industrial immigration.

Number of immigrants from various countries	but Mr Grantham observes that out of about 62 500 male labourers in industrial employment who were asked whether they intended to remain in Burma all but 2 600 or about 4 per cent replied that they proposed to return to their homes. A certain number of the Muhammadans marry Zerbadi and
Hindu	19
Mohammedan	1
Sikh	26
Arya	18

Burman women but in the foreign population as a whole the sex ratio is extremely low indicating the temporary nature of most of the migration and is in all adventitious populations of this kind the proportion of adults is much above the normal.

Immigration from Burma is unimportant amounting to less than 20 000 persons born in Burma and recorded in other countries. The amount of the exodus temporary or otherwise to the neighbouring countries of China and Siam is unrecorded but the Burman is a home loving person and it probably does not amount to any considerable figure.

One of the most interesting features of migration within the Province is the gradual weakening of the movement of population from the centre to the uncultivated areas in the Delta. The number of colonists has declined from 385 to 239 thousand in the last 20 years and this migration will undoubtedly diminish still more rapidly in the future, since the supply of good land in the Delta has almost come to an end and the conditions in the centre of the country have been steadily improving.

73. Of the Provinces which contribute most largely to the streams of migrants Bihar and Orissa which have been dealt with above the most conspicuous are Bihar and Orissa about 1½ million, the United Provinces about one million, Madras ½th of a million, Rajputana ½th of a million and Hyderabad ¼th of a million. In sketching the origin of the principal streams of emigrants into the receiving provinces we have already dealt indirectly with immigration from the provinces which throw off their population and the character of this emigration can now be described more succinctly.

The flow of emigration from Bihar and Orissa is now almost entirely eastward into Bengal and Assam. Some idea of the importance and volume of this emigration is indicated by the value of the money-order remittances received in Bihar and Orissa which varied from 421 lakhs in 1915 to 666 lakhs in 1920 and of course only represents a portion of the pay and wages earned by the emigrants. Even more important than the more permanent streams of emigrants to Assam and Bengal already dealt with is the enormous flow of periodic labour, which pours out from North and South Bihar between March and November into the agricultural and industrial areas of Bengal, returning towards the end of the year for the cultivating season in the home areas. An interesting discussion of this movement will be found in Mr Tallents' report with a detailed description of its origin, volume, direction and character. Emigration from Orissa to Assam and Calcutta has largely increased in the last decade and, as Mr Tallents says —

"The great development of emigration is an indication of the hard times that Orissa has passed through since 1918 and also shows how it was that a repetition of the tragedy of 1866

was avoided. It would be difficult to over-estimate the number of lives saved by the east coast route of the Bengal Nagpur Railway in the last years of the decade by bringing food to the people and, even more important, by taking the people to places where work and food could be found."

We have already examined the important influx from the Chota Nagpur plateau of labourers into Assam and the Bengal *barind*. The stream of recruits into the Assam tea gardens from this area swelled to the unprecedented figure of 143 000 in 1918-19.

While Bihar and Orissa pour out its labouring population eastwards the expansion of its coal and iron industries in the Singhbhum and Manbhum districts are attracting a considerable number of skilled and unskilled workers from outside the former chiefly from Madras, Bombay and the United Provinces and the latter largely from the eastern districts of the Central Provinces. The phenomenal development of the city of Jamshedpur from a village of 5 000 to a flourishing industrial city of 57 000 persons has been made the subject of special discussion in Chapter II of Mr Tallents report. Immigration of a different kind is found in the Orissa States where the vast areas of unreclaimed land are attracting agriculturalists from the United Provinces and elsewhere, and the same is the case of the Purnea and Sambalpur districts and the Santal Parganas, where wasteland is available in considerable quantity at low rents.

United Provinces.

"4. The balance of something less than a million persons lost by the United Provinces on the exchange of migrants within India represents the difference between about 1 400 000 emigrants and rather more than 400 000 immigrants. Immigration which has fallen in the decade, is of little importance. The industries of Cawnpore attract a certain amount of labour from outside while there is the usual contingent of Bengali clerical and professional men, Marwari traders and so forth into the cities, of which Lucknow is the most cosmopolitan. The foreigners in cantonments are drawn from overseas and from the various recruiting grounds of the military forces in India, the number from Nepal including a considerable proportion of ex-service settlers as well as men on the active lists. The only movements of any importance within the provinces are the mercantile, professional and industrial concentration into Cawnpore and other cities, some flow of labour into the tea gardens of Dehra Dun and the surrounding country and some agricultural movement from the dry into the irrigated areas.

There is a large casual and domestic exchange with the contiguous areas of other provinces in which it is estimated that the United Provinces lose about 200 000 wives on the balance. Of emigration Mr Edye writes—

"Emigration to more distant parts of India accounts for a loss of 625,000 males and 202,000 females. This, as the sex proportion shows, represents the movement of labour and of the male labourers, to judge by the number of women that accompany them some 900 000 are permanent and 400,000 are semi-permanent migrants. This loss of labour the province can ill afford as will be shown in Chapter XII. The provinces that gain thereby are Bengal (513 000), Bombay (115,000), Burma (71,000), Central Provinces (102,000) and Assam (77,000). As regards the Central Provinces, the figures vary greatly from decade to decade, and it is evident (and is known to be the case) that they include large volume of periodic migration connected with the harvest. Of the rest, Bengal attracts by its mills, factories, and coal fields, and by domestic service in the city of Calcutta. Bombay by its mills. Burma by trade and service and Assam by its tea gardens. Since 1911 the number of emigrants in Bengal and Assam has largely decreased. In Bombay and Burma the numbers have largely increased. The demand for labour has probably been keener in the two latter provinces where there remains more room than in the former for industrial and commercial development. Losses by emigration to distant provinces re-borne mainly by the Eastern Plain, East Satpuras (North Mozapur), the Gorakhpur district, and certain districts of the Central Plain—Allahabad, Lucknow, Rae Bareilly, Fyzabad, Sultanpur and Partabgarh. The three first named tracts are highly congested. The case of Cawnpore is curious, having to import its labour it also exports it. Probably artisans who have learnt their trade in the mills are attracted by better wages elsewhere. Distant emigration from Agra is balanced by corresponding immigration and a largely direct marriage custom.

Madras.

75. Of the population enumerated in Madras only 5 per cent. were immigrants from outside the province and even so the number of the foreign born has decreased in the last decade by about one-seventh. In return for 1½ million Madrasis enumerated outside the Province only 210 thousand persons from other Provinces or countries were counted in the Presidency. There is little migration

between the natural divisions and apart from a few thousands of Europeans and a few thousands of persons born abroad mostly the families of returning emigrants the immigration largely represents casual exchange between neighbouring provinces though there is some foreign labour in the Nilgiri tea estates. In Madras City itself the foreign-born are only one third of the whole population—a small proportion for so large a city. On the other hand emigration from the Madras

Presidency is both important and interesting. So far as it includes emigrants to the colonies the subject is dealt with later on and it may now only be noted here that a total of 813,512 persons born in Madras was enumerated outside India particulars being given in the margin. In addition to these there are in South Africa in British Guiana, in Mauritius in the Fiji Islands and elsewhere outside India persons of Madras origin for whom no returns have been received. The marginal table also shows the numbers who leave their homes for places within the Indian Empire. The most important streams economically are those to Burma, to Assam and to the planters' estates in Mysore, Coorg and Travancore. Mr. Boig writes—

1. In the United Kingdom	31,744
2. In the Colonies	2,000
3. In the Federated Malay States	1,188
4. In the Straits Settlements	1,188
5. In the Federated Malay States	1,188
6. In the Straits Settlements	1,188
7. In the Federated Malay States	1,188
8. In the Straits Settlements	1,188
9. In the Federated Malay States	1,188
10. In the Straits Settlements	1,188
11. In the Federated Malay States	1,188
12. In the Straits Settlements	1,188
13. In the Federated Malay States	1,188
14. In the Straits Settlements	1,188
15. In the Federated Malay States	1,188
16. In the Straits Settlements	1,188
17. In the Federated Malay States	1,188
18. In the Straits Settlements	1,188
19. In the Federated Malay States	1,188
20. In the Straits Settlements	1,188
21. In the Federated Malay States	1,188
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31. In the Federated Malay States	1,188
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33. In the Federated Malay States	1,188
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35. In the Federated Malay States	1,188
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85. In the Federated Malay States	1,188
86. In the Straits Settlements	1,188
87. In the Federated Malay States	1,188
88. In the Straits Settlements	1,188
89. In the Federated Malay States	1,188
90. In the Straits Settlements	1,188
91. In the Federated Malay States	1,188
92. In the Straits Settlements	1,188
93. In the Federated Malay States	1,188
94. In the Straits Settlements	1,188
95. In the Federated Malay States	1,188
96. In the Straits Settlements	1,188
97. In the Federated Malay States	1,188
98. In the Straits Settlements	1,188
99. In the Federated Malay States	1,188
100. In the Straits Settlements	1,188

Presidency is both important and interesting. So far as it includes emigrants to the colonies the subject is dealt with later on and it may now only be noted here that a total of 813,512 persons born in Madras was enumerated outside India particulars being given in the margin. In addition to these there are in South Africa in British Guiana, in Mauritius in the Fiji Islands and elsewhere outside India persons of Madras origin for whom no returns have been received. The marginal table also shows the numbers who leave their homes for places within the Indian Empire. The most important streams economically are those to Burma, to Assam and to the planters' estates in Mysore, Coorg and Travancore. Mr. Boig writes—

"The United Planters Association of Southern India recruits about 150,000 labourers annually for about 90 estates. Only 237 of these estates, however, lie beyond the limits of the Madras Presidency and it is only the recruitment of labour for these which affects the population of the Presidency. The 237 estates absorb annually about 90,000 labourers—about 20 per cent. of whom are entirely new to the estate world. The labour is recruited in most of the Tamil districts on the West Coast and in Vizagapatnam and the Agency; the recruits are practically all agriculturists. Children are employed on coffee and tea estates but not on rubber estates, out of every 100 recruits 88 are adults and 12 are children. There is no very great disparity in the proportion of the sexes—for in every 100 persons 50 are men and 49 women."

Of the people born in Madras and enumerated in Burma, 100,506 did not specify the district of birth. Of the remaining 172,020 the majority were born in the districts. The main stream of migration to Burma is from the northern districts—Ganjam, Vizagapatnam, Godavari and Kistna—and secondly from the extreme south. Assam gets practically the whole of its Madras element from the three districts of Ganjam, Vizagapatnam and Godavari, whence go 48,119 of the 51,536 emigrants. Most of the remainder are attributed to "Madras" which may stand for the Presidency—in which case the number in all probability should be treated as coming from the same districts.

76. It will be of some interest to consider migration between British Territory and Indian States as a whole. The marginal statement shows that the inter-

Migration between British Territory and Indian States

States	GAIN AND LOSS BY MIGRATION		
	Net Gain or Loss	From British Territory (000)	To British Territory (000)
1	2	3	4
State of Mysore	120	100	20
British India	17	100	10
United States	100	100	10
Malaya States	100	100	10
Punjab States	100	100	10
Central States	100	100	10
North States	100	100	10
South States	100	100	10
TOTAL GAIN	100	100	100
State of Mysore	100	100	100
British India	100	100	100
United States	100	100	100
Malaya States	100	100	100
Punjab States	100	100	100
Central States	100	100	100
North States	100	100	100
South States	100	100	100
TOTAL LOSS	100	100	100
Net	100	100	100

these such migration as is not of a casual domestic and temporary nature is chiefly attracted to the industrial employment in the Kolar Gold Fields and the coffee and areca plantations of the western divisions, where the indigenous population is sparse. There is practically no permanent emigration from the State. There is no pressure on the soil and the local industries afford sufficient employment for any surplus labour. The figures of emigration show a substantial drop since

1911 The net loss by the interchange of migration is greater in Rajputana than that in any other province or state in India. There is very little industrial employment in this Agency to attract immigrants, while in many tracts the infertility of the soil and the economic difficulties of cultivation have driven the people to look for lucrative means of livelihood elsewhere. The enterprising Marwari traders have penetrated to every corner of the country and their shops are seen in every important bazaar throughout India. The most important streams of emigration from this Agency to British Territory are those to (1) the Punjab 151 000 (2) Bombay 126 000 (3) Ajmer Merwara and the United Provinces 88 000 each (4) Bengal 47 000 and (5) Delhi 34 000. The Bombay States also lose heavily sending more than 500 000 emigrants to the British territory in Bombay. A considerable part of these are casual migrants but there is a steady flow into the industrial areas of Bombay and Ahmedabad cities. The adverse balance in the Hyderabad State has increased since 1911 from 59 to 160 thousand. A part of this difference is undoubtedly due to special famine conditions in Hyderabad at the end of the decade but while the number of immigrants from the Bombay Presidency to this State has been decreasing from decade to decade that of the emigrants is steadily increasing on account of the higher wages prevailing in the Presidency. The emigration to the Central Provinces from this State is partly of a domestic type and partly a periodic influx for cotton picking, many of the labourers staying on for general labour and for the spring harvest. The loss in the Central India Agency is due to the abnormal conditions of famine in the Rewa State, which sent about 121 000 emigrants to the Central Provinces and Berar and 16,000 to Assam. Indore is the only State in this Agency which attracts a considerable number of outsiders even from non-contiguous tracts and it does so by virtue of its position as a growing industrial centre. The number of emigrants to this State from Rajputana and Bombay amounted to 45 and 22 thousand respectively. Emigration from Kashmir has also somewhat increased and by far the largest number (75 000) goes to the Punjab. Emigrants from the Ladakh district of the State get as far as Simla where they find employment as labourers.

North-West Frontier
Nomadism.

77 Migration among the peoples of the North West Frontier of India has a special character of its own since a large proportion of the tribal population is essentially nomadic in character. In the North West Frontier Province, besides the regular immigration of traders from Afghanistan which will be discussed later on, the more important movements are the pastoral migration from the hills of the tribal territory to the plains and valleys in the British districts and the periodic flow of labour across the tribal borders and from Kashmir. The immigration of tribal graziers and labourers has considerably decreased since 1910 on account of political and economic difficulties on the border areas. In Baluchistan as Mr Bray pointed out in 1911 birth place entirely fails as a guide to the extent of nomadism and the only distinguishing test between the indigenous, semi indigenous and alien population is race. Writing of nomadism in Baluchistan Major Fowle says—

Apart from exclusively nomadic regions—such as Central Arabia—probably no country in the world with any claim to a settled population has a greater leaven of nomadism than Baluchistan. Its people seem indeed to have discovered the secret of perpetual motion. The Autumn and Spring are—as all over the world—the two seasons of migration, in the former towards the plains, in the latter towards the high-lands. Travelling in Baluchistan at either of these seasons—in Zhob, Quetta, Peshawar and Loralai one finds the Powindahs on the march on the way to or back from India in the Bolan passes of Sarawan Brahmins seeking or avoiding the warm of the Kachhi in any of the southern passes border of Jhalawan coming from or going down to Sind. These are among the great seasonal migrations, but all the year round a considerable proportion of the inhabitants are on the road. Even the agriculturists often only occupy their so-called permanent villages for certain periods and return to tent life as soon as the season permits. If one had to sum up the main characteristics of the Baluchistan population in a single word that word would be nomadism. In 1911 of the total indigenous population only 54 per cent. passed their life permanently under roof, 13 per cent. used both roof and tent while 33 per cent. were nomads pure and simple. Similar figures for this decade are 60, 18 and 22. Thus the settled classes have gone up by 6 per cent. the semi-nomad by 6 while the nomad has dropped by 11. These figures would seem to bear out Mr Bray's prophecy of 10 years ago. Speaking broadly I fancy that, though the growth of village life will be slow it will be sure from now onwards. Different conditions will doubtless give rise to different results. But the most notable trend of evolution, as pastoralism gradually gives way before agriculture will probably be from tent all the year round to mud huts in the winter from mud huts to hamlets from hamlets to villages. He added that migration into towns would only

become general when the tribal system fell hopelessly into decay. As we have seen there are no signs as yet of this latter movement. One consideration must however be borne in mind before attributing to these figures a clear indication of a natural movement from pastoralism to agriculture and that is the unnatural effect of famine. This visitation caused abnormal migration and it is possible that some of the immigrants who would naturally be nomads left Baluchistan before the census commenced and thus escaped enumeration. Another fact to be considered is that among our indigenous population we have included various tribal pariahs such as the Jatt, Dehwar, Sayyid, etc. If we exclude these as we should do if we are to get at the true tribesmen of the country, the nomad percentage of course goes up. Notwithstanding all this, however, the general impression one receives from these figures is that there is a historic movement from pastoralism to agriculture and this impression is confirmed by the review of racial nomadism which follows below. The main and normal causes of nomadism in Baluchistan are the same as elsewhere in Asia—Climate, extremes of heat and cold, pastoralism, and lack of cultivable and irrigable land. Of the three indigenous races with which we are dealing, speaking very generally the Brahui is most affected by the first, the Baluch by the second, and the Pathan by the second and third. Two other abnormal causes for migration may be added which in the present decade played a large part—famine and pestilence.

There are undoubted signs of a tendency on the part of these tribes to settle down and a movement from pastoralism to

	1911	1921
Male	1,111,111	1,111,111
Female	1,111,111	1,111,111
Total	2,222,222	2,222,222

towards agriculture, as the marginal figures will at once indicate. Mr. Bray pointed out in 1911 that the figures of the population of Sind showed the draw of the Brahuis from the Jhalawan into Sind, and that the sex proportion in the figures, together with the decrease in the number of Brahui speakers in Sind in spite of the large number of the immigrants, indicated that this Brahui migration was of a permanent nature. Major Fowle writes—

"The special information on which Mr. Bray based his remarks is not unfortunately available at this Census. When this information was applied for the Bombay ship had already been despatched from their caste bundles and the details required could not be supplied. Such figures as we have got show only that there is a considerable Brahui migration to Sind, that this migration has fallen in numbers since 1911 and that the proportion of females is also less. The drop in numbers has probably been caused by the ravages of Influenza. The lesser proportion of females (70 per cent. to 81 per cent.) would not *prima facie* support Mr. Bray's theory of a permanent Jhalawan settlement in Sind, but where he had so much data to go on and I have so little (and the female variation is in my case small) I do not adduce the drop as a serious argument against his proposition. Under the circumstances I am afraid that the final solution of this interesting problem will have to be left to the investigation of my successor of 1931."

78 The number of persons resident in India who were born outside the Indian Empire is 603,526 and of these 271 thousand were born in Nepal, 116 thousand in the British Isles, 108 thousand in China and 18 thousand in Afghanistan

Immigrants to India from other Asiatic countries

The immigration from Nepal is not without interest. The provinces of

Nepal

Province or State in which enumerated	BORN IN NEPAL			
	1921		1911	
	Males	Females	Males	Females
India	161,119	112,813	160,974	110,274
Bengal	48,613	38,345	60,230	46,467
A. M.	46,409	23,476	31,929	15,771
United Provinces	20,221	14,467	25,738	17,660
Bihar and Orissa	8,591	2,151	11,912	7,612
Sikkim State	1,771	8,105	12,912	11,707
Burma	10,291	2,092	4,783	1,214

enumeration of the bulk of these immigrants are given in the margin. Casual migration across the borders of Bengal and the United Provinces must account for a certain number but it is unfortunately impossible to set against them the casual emigrants from these provinces into Nepal territory. The majority of the Nepalese enumerated in the United Provinces consist of soldiers in the Gurkha regiments with their families and of a substantial number of settlers mostly old soldiers. There were Gurkha regiments also stationed in the Punjab, the North-West Frontier Province and Burma. The migration into Bengal and Sikkim is of a different kind. In 1891 nearly two-fifths of the population of the Darjeeling district had been born in Nepal and the proportion of Nepalese born in Sikkim in 1901, when the first enumeration of the State was taken, is about the same. As

is natural the settlers have died out and have been replaced by their children who being born in Indian territory do not find a place in the returns but the fact that in the present enumeration 20 per cent. of the Darjeeling district and 25 per cent. of the Sikkim State have been recorded as born in Nepal shows that colonization has still been going on. The immigration into the Jalpaiguri district being mainly connected with the tea garden industry is of less permanent nature and the fall in the numbers of immigrants in that district by about one-third is ascribed to a growing preference on the part of employers for aboriginal labour from Central India. The Nepali settlers in Assam were originally mostly old Gurkha soldiers who had settled down with their families, or temporary or periodic visitors for the most part buffalo graziers. There has however been a large influx of late years of more permanent settlers the majority of whom are cattle-owners and graziers. Basing his estimate on the number of persons who speak Nepali or some kindred language, Mr Lloyd calculates that there must be at least 104 000 persons of Nepali race in Assam at present, the number having almost doubled since 1911 and there seems some doubt among the local officers as to whether these pastoral immigrants, with their large herds of cattle and their primitive methods of agriculture, are a welcome addition to the population. Of less importance is the immigration of Nepalese into Bihar and Orissa, which from the sex figures appears to consist chiefly of wives brought over the Nepal border and married to members of the lower castes. The number of Gurkhas serving in India at the time of the census was 21 635 consisting of 497 officers and 21 138 of other ranks.

Afghanisation.

There has been a steady decrease during the last twenty years in the number of immigrants into India from Afghanistan. The majority of native Afghans are enumerated in the North West Frontier Province and Western Punjab and the following description of these Afghan immigrants is taken from the North West Frontier Province report —

Of all the countries outside India Afghanistan is by far the most important contributory to the immigration into this Province. This immigration is not entirely of the periodic type and divides itself into four main streams before reaching British territory —

- (a) The carriers who pass in *bulhas* (caravans) through the Khyber Pass under the protection of the Khyber Rifles twice a week. They do not winter in British territory but keep moving both ways between Kabul and Peshawar and therefore do not add much to the population of the Province.
- (b) The Afghan labourers who immigrate to British territory for the winter to work as labourers. They enter by the Khyber Peshwar Kotal (Kurram) and Gomal routes, and are found all over the Province, but Peshawar is the chief field of their operations.
- (c) The tribes of warrior traders who are included under the term *Powindah*, from *Par-windah*, the Persian word for a bale of goods or perhaps more probably from the same root as *Powal*, a Pashto word for "to graze." They are almost wholly engaged in the carrying trade between India and Afghanistan and the Northern States of Central Asia, trade which is almost entirely in their hands. They assemble every autumn in the plains east of Ghazni with their families, flocks herds and long strings of camels laden with the goods of Bokhara and Kandahar and forming enormous caravans numbering many thousands, march in military order through the Kakar and Wazir country to the Gomal and Zhob passes through the Sulaiman. Entering the Dera Ismail Khan district, they leave their families, flocks and considerable proportion of their fighting men in the great grazing grounds which lie on either side of the Indus, and while some wander off in search of employment others pass on with their merchandise by railway to Multan, Rajputana, Lahore, Amritsar, Delhi, Calcutta, Benares, Calcutta and other important centres of trade. In the spring they again assemble and return by the same route to their homes in the hills about Ghazni and Kelat-Ghulistan, the tract popularly known as Khorasan. When the hot weather begins the men, leaving their belongings behind them, move off to Kandahar, Herat and Bokhara with the Indian and European merchandise which they have brought from Hindustan. In October they return and prepare once more to start for India. They speak the soft or western Pashto. The *Powindah* are partly traders and partly graziers and the latter are hardly distinguishable from the fourth group of periodic Afghan immigrants.

- (d) The graziers who pass their summer in their hilly homes and wander to the low-lands in cold weather in search of pasture. They are to be found all over the Province but their chief winter resort are the grazing grounds of Peshawar and Kohat.

The decrease of Afghan immigrants to India is the result of various conditions, the principal being the growing difficulty in obtaining permission from the Afghanisthan authorities to cross the borders, the contraction in the areas in British India available for grazing and the difficulties of reaching British territory owing to the unsettled condition of the tribal territory and the improvement in the organization and armament of the tribes. Influenza also took a large toll of the Afghan immigrants in the North West Frontier Province and Punjab but its exact effect on the decrease in the numbers cannot be gauged. The Afghan immigrants are usually accompanied by their wives and the number of women per 100 men enumerated in the North-West Frontier Province was 69. A marked feature of the last decade in Baluchistan is the gradual change in the population from pastoralism to agriculture and the interesting account of the Powindahs which forms an appendix to the Baluchistan Report shows that these 'warrior traders' like the indigenous population of the province are rapidly losing their nomad habits and settling down. Of the Powindahs enumerated at the present census 60 per cent are nomad, 1 per cent semi-nomad and 37 per cent settled, the figures of 1911 being respectively 81, 5 and 14.

The number of immigrants from China to India has risen since 1911 from 80 ^{China} thousand to 108 thousand, all but 6 per cent of the Chinese being enumerated in Burma. Though the increase is undoubtedly real it is to some extent exaggerated by the fact that the census was taken later in March when the influx of Chinese is at its highest, and also by the fact that, as a Chinaman considers that no other country is so respectable a birthplace as China, many Chinese who were born in Burma or the Malay Peninsula have probably returned their birthplace as China. The number of Chinese returned in provinces other than Burma is comparatively small. In Bengal where they are found mostly in Calcutta and where they come in larger and larger number (5,856 against 3,087 in 1911) their efficiency as shoemakers and carpenters enables them to find remunerative employment as soon as they arrive in spite of difficulty in regard to language.

Arabia had 23,000 persons resident in India in 1911 but with the exclusion ^{Arabia} of Aden from the birthplace tables the number has now fallen to 5,000.

79. Of the 131 thousand immigrants from outside Asia 121 thousand come from ^{Immigration from outside Asia} Europe, the United Kingdom sending 116 thousand. British born males have decreased from 103 to 93 thousand probably owing to the release of civil and military officers for leave after the war and the absence of a considerable number of military units on foreign service. On the other hand wives had been able to rejoin their husbands in India and the number of British born women has increased from 19 to 23 thousand. The war is also responsible for the general decrease in the number of those born in other European countries, the number of German-born which was 1,860 in 1911 having dropped to less than 250. The Americans and Australasians, on the other hand, are in rather larger numbers than ten years ago.

80. The statistics of emigration outside India are far from complete. Nothing ^{Immigration from India to other countries} is known of the movements across the borders of India into China, Nepal, Afghanistan and Persia and though the larger part of this movement is casual it cannot be said to be inconsiderable*. Similarly there is no record available of the emigrants to Nepal or Bhutan from Bengal and the United Provinces though, as the Nepalese Government makes no effort to attract foreigners, the movement is not perhaps important. Nor are any reliable data forthcoming of the considerable movement which must take place from Burma into China and Siam. At a rough census made of the population by nationality in the three Wilayats of Mesopotamia—Baghdad, Basra and Mosul—the number of Indians enumerated, other than soldiers and coolies in the labour-corps, was 3,061 of which all except 537 were in the Baghdad Wilayat and were probably mostly traders and railway employes. The number of Indians

* Many Pathan tribes on the Afghan Frontier live sometimes on one side of the border and sometimes on the other, according to climatic, pastoral or local political conditions. The Barech Pathans and a number of Mengal Brahmins spend their time indifferently between Peshawar and the Afghan district of Shorawak and some of the Achhakzais between Chaman and Kadai. The Shikhar Pathans are equally at home either in Baluchistan or independent territory. The Baloch of Makran, Kharan and Chagai frequently pass over into Persia and there remain for varying periods. (Baluchistan Census Report page 39 para. 66)

belonging to regiments and labour-corps outside India at the time of the census was about 125 000. Of these the majority were probably in Mesopotamia and Palestine. For emigration to distant countries outside India we have to depend for our information on the report of the local British authorities. The information received to date is contained in Subsidiary Table V. It is doubtful however if the statistics are complete and in any case their interest is diminished by the large number of the persons who failed to specify their province of birth. According to the returns the number of Indians in the colonies, irrespective of birthplace amounts to 1 662 000 of whom 1 029 000 or about two-thirds are males. More than four fifths are Hindus and about half of the remainder are Mussalmans. The colonies which attract an appreciable number of emigrants are shown on the margin. About one-ninth of the emigrants failed to specify their

Indians emigrated to various Colonies		In thousands	Province of birth, and of the remainder no less than 841 000 or 80 per cent. were from Madras
Ceylon		461	24 000 from Bombay 18 000 from the Punjab
Straits Settlements and Malay		401	17 000 from the North-West Frontier Province
Natal		47	and 11 000 from Bengal. The majority of the
Trinidad		37	emigrants work as agricultural labourers on
F. P.		32	rubber tea, coffee and other plantations.
Mauritius		17	Under the Defence of India Rules indentured
Kanji		17	labour emigration was stopped in March, 1917

but there had been a considerable outflow of labourers to the colonies in the previous years and more than 2·4 millions of natives of India passed through the ports of Madras and Calcutta as indentured labourers for the various colonies during the decade. Of the labourers 33 000 went from Calcutta but the bulk were from the Madras Presidency and their destination was Ceylon and the Straits Settlements. There is very little emigration from the ports of Bombay and Karachi. Altogether about two million labourers returned to India from the colonies during the decade.

Ceylon.

It will be seen from the marginal figures that the movement to Ceylon is of

Year	Number of persons born in India who were enumerated in Ceylon.	long standing, the Madras Presidency being the principal source of supply. More than 1·1 millions of Tamils have been enumerated in Ceylon at the recent census of the island. About 517 000 of them are Ceylon Tamils who have been domiciled in the island for many centuries, while the remaining 603 000 are Indian Tamils, who have recently arrived from India chiefly in response to the demand
1881	778,789	
1901	284,580	
1901	436,622	
1911	473,620	
1921	460,782	

for labour on the tea, rubber, coconut and other estates in Ceylon. Of the Indian population in the island 80 per cent. are Hindus and the rest Christians and as is usual in an immigrant population the Indian Tamils have a high proportion of adults. Regarding emigration to Ceylon the Superintendent of Census Operations, Madras, writes as follows—

The number of emigrants registered by the Ceylon Labour Commission in the decade was 741 611. For the years 1911 to 1913 particulars are given for men, women, children and infants who migrated in the proportion of 601, 203, 132 and 61 per 1 000 person and although these details have not been tabulated, in recent years there is every reason to suppose that the proportion remains fairly constant. Infants are children below five years of age, children, males between five and fourteen and females between five and sixteen. For the years 1917 to 1920 figures are given separately for emigrant proceeding to Ceylon for the first time and those who have been there before. It was only in 1919 the year of bad seasons and high prices, when the number of emigrants rose with a bound, that the new emigrants outnumbered the old. In the other three years those returning to Ceylon after one or more visits numbered about 78 000 and those going for the first time were only about 11,500.

The Ceylon Labour Commission recruits only for estates, consequently practically all those who emigrate through its agency are agriculturists by occupation. The majority of them are drawn from the Parayan, Kallan, V. Mala and Pallan castes who together have contributed 519 000 out of the 741,600 who have emigrated during the decade. Nearly half the emigrants registered in Trichinopoly district, which implies that if they did not actually come from village in that district they came from no great distance. The rest are recruited mostly in the Tamil district—all of which contribute quotas. M. Sabarwandi 10 000; and the T. Nagar district. Cuddalore, Godavari and Guntur are also drawn upon.

Other colonies.

Besides Ceylon the Straits Settlements and Malay take in an appreciable number of emigrants from India. The number has increased from 231 to 401

Proportional migration to and from each Province and State

Province, State or Agency	NUMBER PER MILLION OF						NUMBER OF EMIGRANTS TO 100 MILES AMONGST					
	IMMIGRANTS.			EMIGRANTS			IMMIGRANTS			EMIGRANTS		
	Total.	From contiguous districts.	From other places	Total	To contiguous districts.	To other places.	From contiguous districts.	From other places	To contiguous districts.	To other places	From contiguous districts.	To other places
1	2	3	4	5	6	7	8	9	10	11		
Ajmer Merwara	222	119	103	85	30	40	128	55	195	67		
Assam	161	32	129	0	7	2	83	78	85	34		
Bahawalpore	98	58	40	75	68	7	22	15	78	9		
Bengal	40	8	32	14	7	7	79	38	76	40		
Bihar and Orissa	11	0	2	51	32	19	108	99	50	69		
Bombay	40	30	10	22	17	5	88	32	121	43		
Burma	53	8	45	1	1		12	22	65	75		
Central Provinces and Berar	38	32	6	25	13	12	89	50	113	86		
Coorg	207	202	5	14	12	2	40	32	104	119		
Delhi	381	287	94	142	85	57	88	55	240	53		
Madras	5	4	1	40	12	28	90	77	81	46		
North West Frontier Province	68	16	52	29	14	15	38	23	49	30		
Punjab	24	22	2	21	14	7	104	45	81	31		
United Provinces	10	5	5	30	12	18	217	82	152	32		
Baroda State	109	93	16	104	95	9	156	69	138	54		
Central India (Agency)	91	88	3	81	72	9	131	52	129	107		
Cochin State	40	39	1	29	23	6	117	84	88	15		
Gwalior State	61	44	47	91	86	5	119	131	166	59		
Hyderabad State	16	13	3	20	25	4	95	56	109	71		
Kashmir State	19	19		20	18	8	125	51	111	31		
Mysore State	53	35	18	17	12	5	79	80	102	82		
Rajputana (Agency)	25	21	4	88	72	16	187	83	90	51		
Sikkim State	281	19	202	50	49	1	123	63	117	34		
Travancore State	18	12	6	8	4	4	105	91	115	28		

SUBSIDIARY

Migration between Provinces and

PROVINCE, STATE OR ASSEMBLY

PROVINCE, STATE OR ASSEMBLY IN WHICH BORN														
Serial Number.	Province, State or Assembly in which born	Residence												
		Assam.	Bengal.	Bihar and Orissa.	Bombay	Burma.	C. P. and Berar	Coast.	Punjab.	Madras.	N. W. F. Provinces.	United Provinces.	Other Provinces.	Total.
1		2	3	4	5	6	7	8	9	10	11	12	13	14
TOTAL	1871	1,798,187	373,840	222,214	1,061,040	706,723	679,804	186,719	927,187	866,862	87,842	466	222,864	7,977,364
	1911	3,621,864	1,979,774	28,712	39,544	149,663	66,965	669,219	362,277	136,145	669,642	812,112	7,862,352	
Ajmer Marwar	1871	82	320	123	7,061	60	1,824	278	1,626	415	24	729	229	1 1/2
	1911	66	642	142	36,124	180	2,672	1,642	190	26	2,117	829	4 3/4	
Andaman Islands.	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Arora	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Bahr and Ocho	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Bengal	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Bihar and Ocho	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Bomra	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
C. P. and Berar	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Coorg	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Madras	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
K. W. F. Provinces	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Punjab	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
United Provinces	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Banda State	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
C. I. (Agency)	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
C. I. (Agency)	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Cochin State	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyderabad State	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Kashmir State	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysore State	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Nepal (Agency)	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Pahla State	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Tromsore State	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
In the unprovided	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
French and the Indian Islands	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0
Outside India	1871	0	0	0	0	0	0	0	0	0	0	0	0	0
	1911	0	0	0	0	0	0	0	0	0	0	0	0	0

In the table residence in place where the person was born is given for 1911 against the Province and serial number of the person.

TABLE III. in 1911 and 1921.

HIGH ENUMERATED

INDIAN STATES											GRAND TOTAL	Serial Number
	Central India	Gwalior	Cochin	Hyderabad	Kashmir	Mysore	Rajputana	Sikkim	Travancore	TOTAL		
	16	17	18	19	20	21	22	23	24	25	26	
5	16	17	18	19	20	21	22	23	24	25	26	
32,404	548 094	290 340	39 759	202,781	63 420	814 531	243 002	22,978	78 591	2,030 990	9 968,988	
2° 957	474 255		47,266	260 713	76 773	312 908	303 553	29 835	61,165	1,789 425	9 353,318	
110	2 042	703		2,046	11	20	19 616	1		26 049	42,419	1
179	5 226			6 698	27	37	27,543	2		39 712	84 096	2
2				2		15				21	316	3
2	50	25		5	2	18	46	23	14	101	75 909	4
6	8			5		13	105	1		138	73,738	5
232	158	25		46	94	65	55		1	674	60 242	6
41	30			181	20	11	210	1		494	75,961	7
257	949	325	9	293	105	425	774	1 500	58	4 761	685 581	8
332	1 004		22	717	131	413	727	3 052	124	6 532	552 515	9
42	708	95		580	32	101	333	128	5	2,024	1 955 036	10
150	1 116		25	17	79	59	398	189	2	2 034	1 991,033	11
215 838	45 500	8 832	654	60 700	150	28 583	14,762	1	371	370,451	567,599	12
207 748	54 111		1 075	118 830	184	29 771	14,568	232	197	426 706	692 966	13
88	60	4	8	213	8	322	27	4	19	759	19 050	14
63	13			185		273	32	10	22	598	12,631	15
505	85 701	8 073	55	25 416	30	823	629		203	121 495	400,601	16
321	80 061		13	20 947	11	1 183	936		41	103 512	314 475	17
			1	16		2,873	1		3	2,393	2,850	18
			1	1		3 071			1	3 074	3 858	19
264	498	52	28 388	84 149	34	207 306	212		58 277	437 170	914 792	20
228	1 033		30,488	67 821	27	263 417	290		49,520	412 824	824 684	21
05	367	397		237	7 738	44	328		2	9 088	67 560	22
39	563		1	364	12 904	283	507		8	14 674	66 706	23
745	5 420	2,541	7	1,018	52,463	956	63 337	43	42	127 222	530,042	24
159	1 054	722		1 112	144	260	2,127		8	5 500	69 327	25
921	8 283		3	4 869	59 707	1 662	85,326	147	39	161 156	603,806	26
3 032	125 024	50 007	7	6 443	557	585	56 587	58	41	263 141	1 399,794	27
3 997	169 130		51	9 500	982	911	70 064	98	59	254 702	1 408 086	28
	1 741	579	9	108	6	72	862		4	3 471	221 206	29
	2 432			204	4	46	1,601	1	4	4 542	235 455	30
744		127,913		105	11	51	27 465	1	0	166 286	480 632	31
777	174 753			316	23	13	53 045		21	228 548	250 025	32
1 413			38	565	35	85	59 329	2	1	101 468	535 800	33
	25			14		367			12,366	12,772	22 897	34
				10		206			9 946	10 162	20 381	35
267	2,697	242	9		7	3 335	396		50	7 003	363 453	36
164	2 177		27		11	4 343	321		67	7 109	306 233	37
6	40	34	1	12		154	183			380	84 246	38
18	0			83		42	90		1	304	81 921	39
15	51	70	77	2,580	2		163		312	3 279	99 786	40
32	491		108	3 880	10		67		281	4 865	131 253	41
7,473	85 899	75 041	11	8 040	113	2 971		11	8	170 573	86 893	42
6 239	144 401		15	14 271	250	1 378		73	15	166 642	855 496	43
						1				1	4 137	44
						357				12,752	22 241	45
						182				15 397	26 269	46
2	178			1 818	15		1 140		102	3 280	26 033	47
6			30	3 675		59	6		135	5 971	17,176	48
620	241	61	72	154	16	637	145		60	2,011	78 870	49
559	192		87	288	5	743	170		150	2 192	87 315	50
614	3 406	653	70	5 654	1 630	4,031	750	21 142	1 618	40 486	603 526	51
550	3 554		76	7,586	2,376	4 768	1 064	26 027	552	47 791	677 122	52

included. They are shown in Subsidiary Table V
 include those of Delhi and Gwalior respectively

Variation as compared with 1911 in the number

No.	Province, State or Agency.	CERTAIN OTHER COUNTRIES.								DEPART.		
		ITALY		AFGHANISTAN		CHINA		JAPAN		1901.		
		1901.	1911	1901.	1911	01.	1911.	1901.	1911.	Foreign.	Males.	Females.
	1							0		10	11	10
	INDIA	232,500	230,261	27,200	21,000	100,000	90,000	1,907	1,801	120,000	90,000	21,000
	Province	201,000	200,000	20,000	10,000	100,000	90,000	1,700	1,600	100,000	90,000	20,000
1	Ajmer Merwar	41	17	100	100					1,000	100	0
2	Andaman and Nicobars	10		0	0			0	0	100	100	10
	Assam	70,000	67,000	100	100	100	100			1,000	1,000	0
	Bihar	1,000	1,000	1,000	1,000			0	0	1,000	1,000	0
3	Bombay	67,000	200,000	1,000	1,000	1,000	1,000	100	100	10,000	10,000	10,000
4	Bihar and Orissa	10,000	10,000	100	100	10	10	0	0	1,000	1,000	0
5	Bombay	1,000	100	1,000	1,000	100	100	100	100	10,000	10,000	10,000
	Burma	1,000	1,000	10	100	100,000	10,000	100	100	1,000	1,000	1,000
6	Central Provinces and Berar	0	10	100	1,000					1,000	1,000	0
7	Coast	0					1			10	10	0
8	Madras	100	10	10	100	100	100	100	100	1,000	1,000	1,000
9	K. W. F. Province	1,000	1,000	10,000	10,000					1,000	1,000	1,000
10	Dahli	100		100	1,000					1,000	1,000	0
11	Punjab	1,000	1,000	10,000	10,000	100	100	100	100	10,000	10,000	10,000
12	United Provinces	10,000	10,000	100	1,000	100	100	100	100	10,000	10,000	10,000
	States and Agencies	10,000	10,000	100	1,000	100	100	100	100	10,000	10,000	10,000
13	British India	10	10	10	10					10	10	10
14	Central India (Agency)	10		100	100	10	10	10	10	1,000	1,000	10
15	Orissa State	10		10	100			10	10	100	100	10
16	Coastal State									10	10	
17	Hyderabad State	10	10	100	100			10	10	1,000	1,000	10
18	Kashmir State	1,000	1,000	100	100					10	10	10
19	Mysore State	10		10	10	10	10			1,000	1,000	10
20	Rajputana (Agency)	10	100	100	100	10	10			100	100	10
21	British India	10,000	10,000	10	10					100	100	10
22	Delaware State					10	10	10	10	100	100	10

TABLE IV.

of immigrants from certain foreign countries.

ISLANDS			GERMANY		FRANCE		OTHER EUROPEAN COUNTRIES		AFRICA		AMERICA		AUSTRALASIA		Serial Number
Persons.	1911		1921	1911	1921	1911	1921	1911	1921	1911	1921	1911	1921	1911	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
121,357	101,980	19,377	247	1,860	1,466	1,478	3,745	5,208	4,719	3,787	3,446	2,750	1,683	1,266	
109,483	91,860	17,623	208	1,756	1,262	1,319	3,315	4,730	4,245	3,214	3,174	2,495	1,507	1,208	
1,223	1,099	124			38	29	7	14	20	9	8	9	4	12	1
181	163	18	1	1	1		4		1		6	3	15	2	2
1,427	1,110	303	2	29	10		23	40	10	14	07	53	37	25	3
3,237	2,903	370	4	9	6	6	22	21	18	6	32	37	16	10	4
12,170	9,355	2,824	62	305	234	175	607	843	134	232	407	312	422	306	5
2,572	1,859	713	6	148	25	26	166	115	17	30	179	68	40	40	6
10,682	10,647	3,035	49	353	182	164	1,269	1,716	2,260	1,503	455	277	177	149	7
7,354	6,279	1,075	13	214	204	211	239	558	70	53	559	403	214	205	8
4,846	4,275	571	14	74	175	101	304	111	75	46	374	145	51	60	9
82	53	24		4	7	6	3	3	2	3	3	2	4	2	10
6,497	4,903	1,599	24	403	274	504	301	505	737	893	261	255	107	97	11
4,830	4,390	446		8	3	10	9	37	16	24	5	26	20	23	12
23,311	19,954	3,357	2	76	15	51	59	463	63	122	24	267	13	107	13
			5		40		100		583		307		136		14
22,000	18,846	3,160	26	132	42	36	137	299	239	277	458	636	251	154	15
11,874	10,120	1,754	39	104	204	159	430	478	474	553	272	255	178	60	
50	35	20		1	11	6	3	8	371	257	21	12			16
3,192	2,841	351	5	16	43	24	7	51	9	129	72	89	11	8	17
					6		14		8		13		20		18
20	14	6		4	1	2	17	24			3	3	4	1	19
3,790	3,359	431	9	3	33	12	107	131	10	93	48	40	83	11	20
109	69	40		6	0	3	4	8	8	6	8	10	4	1	21
3,930	3,239	650	25	52	95	90	93	182	55	46	77	76	36	34	22
621	342	179		6	6	20	22	12		16	26	16	11	4	23
11	11			3			3								24
237	160	77		11	3	2	155	62	6	1	4	9	8	1	25

SUBSIDIARY TABLE V

Number of Indians born in India who were enumerated in Great Britain and the Colonies in 1921

[illegible][illegible]

Number of emigrants to Colonies, etc., who were registered at the ports of Calcutta and Madras during the decade 1911 to 1920

SUBSIDIARY TABLE VII.

Province, State or Agency	Actual Population at Census	Immigrants (Persons born elsewhere but enumerated in Province or State)	Persons born in Province or State but enumerated in other parts of India	Persons born in Province or State but enumerated outside India	Natural Population (Persons born in a Province or State irrespective of the place of emigration)
1	2	3	4	5	6
India	318,885,980*	603,326	1,050,951†	319,333,405†	
Ajmer Merara	495,271	169,890	42,410	1	427,801
Andaman and Nicobars	27,086	15,120	316	12,282	6,770,007
Assam	7,090,246	1,290,167	75,009	69	781,650
Baluchistan	709,625	78,387	60,242	11,406	16,350,860
Bengal	47,592,462	1,029,640	685,581	12	19,491,002
Bihar and Orissa	37,061,875	422,244	1,955,076	21,410	26,211,508
Bombay	26,701,148	1,081,619	567,699	1,236	12,525,762
Burma	13,212,102	706,725	10,050	603	15,777,460
C. P. and Berar	15,070,660	609,504	406,601	2	192,753
Coorg	163,838	31,037	2,850	23	371,768
Delhi	488,188	185,770	69,327	841,670	44,340,755
Madras	42,791,155	269,862	914,792	16,935	5,003,409
N. W. F. Province	5,076,476	167,562	67,560	18,487	25,023,352
Punjab	25,101,060	627,137	530,942	2,747	47,432,705
United Provinces	46,510,668	480,414	1,399,794	390	2,115,030
Baroda State	2,126,522	232,494	221,206	11	5,935,572
Central India (Agency)	5,997,023	548,094	486,632	4,441	907,650
Cochin State	979,080	30,769	23,897	4	3,184,764
Gwalior State	7,180,076	290,340	250,025	208	12,632,740
Hyderabad State	12,471,770	202,781	363,453	15	3,341,380
Kashmir State	3,320,518	63,420	84,246	2,318	5,766,465
Mysore State	5,978,892	314,531	99,786	224	10,400,409
Rajputana (Agency)	9,844,384	243,002	867,893	8,000	62,870
Sikkim State	81,721	22,078	4,133		3,062,721
Travancore State	4,006,062	73,501	22,241		

† Includes 117,275 emigrants who failed to specify their province of birth

CHAPTER IV

Religion

Introductory remarks.

81 The standard instructions for the entry of religion in the schedule were as follows —

"Column 4 (Religion) Enter here the religion which each person returns, as Hindu, Muhammad, Sikh, Jain, Christian, Parsi. In the case of Christians the sect also should be entered below the religion. In the case of aboriginal tribes, who are not Hindus, Mohammedans, Christians, etc. the name of the tribe should be entered in this column."

These instructions were adapted, expanded and explained according to the local requirements of each province. It was, for example, generally thought desirable to obtain statistics for the two main divisions of the Muhammadans, viz. the Sunnis and Shias and in some Provinces certain sects of Hindus and Jains were asked for while the wording of the last sentence which aims at obtaining the return of those who still adhere to their tribal religion and are not yet included in any of the main religious communities, was in some cases further expanded.

82. Before discussing the statistics of the religious return of the population it will be well to arrive at some idea as to what is meant when we assert that there are so many Hindus, so many Muhammadans, so many Buddhists, Christians, etc. in India. Religion has various aspects, philosophical, doctrinal, ethical, ceremonial spiritual or personal and lastly communal, and when a man is asked what his religion is he will usually frame his answer in accordance with that aspect which the occasion and object of the question seem to suggest. In the large majority of mankind religion represents to the individual that particular outlook and attitude towards the universe and his fellowmen which forms the tradition of his family and his clan. Of the 316 millions whose religion was returned in the schedules the number of those who recorded themselves under such categories as indefinite beliefs, agnostic, atheist, freethinker etc. which do not refer to any recognised religious communion is about 850. The figure can hardly really cover all those who have peculiar personal views on transcendental subjects. The point is of little importance, but it serves to illustrate the fact that the census is not concerned with personal religion but is an attempt to record religion in its communal aspect, merely distinguishing those who lay claim to one or other of the recognized sections, without looking too closely into the validity of their claims. From this census point of view there is, therefore, no difference between the superstitious and westernized Bengali who may be a Hindu by courtesy only and a Chuhra of the Punjab who may be described as a Hindu by discourtesy. In the case of religions such as Islam and Christianity whose doctrinal basis, in spite of sectarian differences, is fairly distinct and centres round a definite personality the identity of outlook and cultural type is on the whole not difficult to recognize, though on the fringes of each system there are small groups who combine the forms and exercises of more than one community and are difficult to place. But for the vast number of the inhabitants of India the aspect of religion as a binding force which makes of its adherents a corporate entity with a common sentiment and interest is more difficult to apply. We could hardly speak of the Hindu Church. Except perhaps to the few who understand its philosophical meaning Hinduism has no one distinguishing central concept. Superimposed on a heterogeneous people differing widely from one another in race, language and political and social traditions and interests, the vagueness and elasticity of its system and the protean form of its mythology its ceremonies and its ordinances have enabled it to absorb and overlap the various animistic systems which it encountered. But its very adaptability goes far to deprive it of synthesis and cohesion and the inherently disruptive tendency of its caste system, unrestrained by any paramount central authority places it largely at the mercy of local and sectional interests. The

The word is not used merely for the sake of verbal antithesis. In many parts of the country the tribal hill-tribes, e.g. Gonds, Korkus, Khonds, etc. are not considered accountable by caste Hindus, so they are recognized as being definitely outside the pale of Hinduism. The Chuhra, Chamars or Mahars, however, without the need this distinction betrays for them kind of negative feeling as quasi-Hindus. A Mahars writing in modern journal remarks: "There is hardly any record of the Mahars ever having been initiated as Hindus, it being more generosity of the latter to allow the former to call themselves Hindus."

precise value of the census return of Hindus will be further discussed later on in considering the figures returned under that head

83 Apart from the intrinsic interest of the figures for the different religions, religion is used as a basis of classification of most of the statistics presented in the Imperial Tables. The value of this basis of classification has been impugned on the grounds that whatever homogeneity of race, tradition and custom may have been connoted by the term Hindu, Muhammadan, Christian, etc., in the past has ceased to exist to a sufficient degree to influence the statistics. It is argued that so far as customs of demological importance are concerned, e.g., early marriage, seclusion of women, treatment of children, etc., the divisions of real significance are now not vertical sections of society by difference of religion, but horizontal divisions into strata differentiated from one another by social and economic conditions. Thus it was shown at last census that in spite of the similarity of religion between the Muhammadan populations of Bengal and the Punjab the rate of growth of these communities was entirely different owing to difference of tradition and economic circumstances. Again it is doubtful whether in parts of the country the distinction between Hindus and the worshippers of tribal religions affords any useful basis for explaining variations, while in Burma it has been strongly urged that the distinction by religion should be replaced by some more scientific racial classification. While there is something to be said in favour of such arguments it is difficult to see what form of classification could take the place of the religious differentiation. Caste is too complex, too local and too controversial a factor to form a basis for a social and economic division even of Hindu society. The occupational census is, as we shall see, by far the most difficult and unsatisfactory part of the operations, and in any case occupational differentiation even the broad distinction between agriculturist and non agriculturist would not at this stage of India's history afford a clue to the differences of social custom which influence the comparative growth of the people. The differentiation by Religion is in the case of the larger communities, Hindus, Muhammadans and Christians necessary for administrative purposes and probably forms at present the most practical basis for presenting the statistics. Religion still determines some of the customs of the people which are of the most essential demological importance. The doctrines of the different religions relating to marriage and the relations between the sexes undoubtedly affect the comparative fertility of the communities, they probably influence the numerical proportion of the sexes in them and even their economic condition. The Provincial Superintendent, Kashmir, remarks on the latter point —

"The Bakti Muhammadan though probably belonging to the same stool as his Buddhist neighbour indulges in polygamy and produces a host of starving children while his Buddhist countryman is quite content to share his one wife with his brothers, with the result that the family estate is not frittered away by partition and passes on intact from one generation to the other."

Religious doctrines regarding usury have undoubtedly affected the economic progress of the Muhammadans, while their educational development has also been retarded by the preference which their religion imposes upon the language and culture of their holy scriptures. The monastic schools associated with the Buddhist religion have on the other hand placed Burma well ahead of every other Province in point of literacy, while similar advantages have distinguished the Christian community owing to the proselytizing energy of the missions and the influence of western culture.

84 Bearing in mind the general remarks as to the interpretation of the statistics we may now review the figures for the whole population of India. The statement below gives the distribution of the adherents of the different religions, their proportion per 10,000 of the whole population and the variation in the last five censuses. Had some celestial functionary been deputed on the morning of the 19th March, 1921, to make suitable provision for the souls of 100 persons belonging to the Indian Empire, his safest course would have been to assume that 68 were Hindus, 22 were Muhammadans, three were Buddhists, three followed the religion of their tribes, one was a Christian and one a Sikh. Of the remaining two one was equally likely to be a Buddhist or a Christian and the other was most probably a Jain, much less probably a Parsi and just possibly either a Jew, a Brahmo or a holder of peculiar or indefinite beliefs which avoid classification in any of the usual categories. The proportionate strength of each religion in different parts of India varies of course enormously, but the general distribution of the various religious communities differs comparatively little from census to census and is based largely on historical factors.

Religion as a basis of statistical classification

General religious distribution.

which have been dealt with in detail in previous reports. An attempt has been made to show the religious grouping in the map opposite. It will be seen

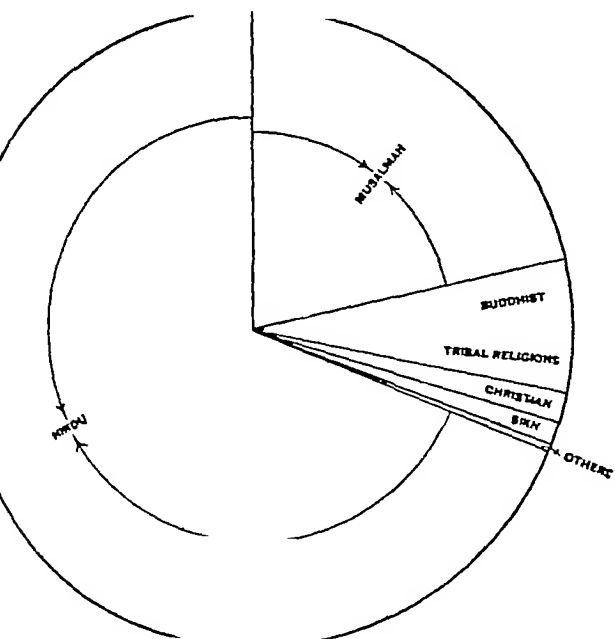
Religion.	Actual number in 1921. (See continued)	Proportions per 1,000 of population in					Variation per cent. (Increase + Decrease—)				
		1911.	1921.	1921.	1921.	1921.	1911-1921.	1921-1921.	1921-1921.	1921-1921.	1921-1921.
1	2	3	4	5	6	7	8	9	10	11	12
Indo-Aryans	208,728	7,800	5,617	7,079	7,800	7,800	+2	+0.6	+0	+13.8	+13.8
Hindus	216,798	6,896	6,969	7,067	7,800	7,800	—	+1.0	—	+10.1	+1
Muslims	2,18,371	141	6,821	7,800	7,800	7,800	—	+0.6	—	+19.1	+14.5
Aryans	684	16	2	2	2	2	+30.2	+30.2	+23.3	—	—
Brahmins	—	—	—	—	—	—	—	—	—	—	—
Sikhs	8,320	183	90	79	87	87	+7.4	+7.4	+1.2	+2.9	+7.4
Jains	1,178	27	40	44	46	46	—	+4.4	+1.3	—	—
Buddhists	11,871	606	647	827	806	186	+7	+13.1	+27.9	+100.6	+130.6
Iravans (Burmese) (Pans)	168	8	2	2	2	2	+1.7	+0.8	+0.7	+6.8	+13.8
Somalis	19,111	1,800	1,861	1,800	1,800	1,800	+0.8	+0.8	+0.7	+1.6	+1.4
Muslims	66,726	2,17	2,126	2,127	1,906	1,97	+1	+4.7	+0.7	+0	+5.7
Christians	4,784	80	126	90	79	79	+23	+30.6	+30.0	+23.0	+100.6
Jews	21	4	7	4	4	4	+1.2	+1.2	+1.2	+1.2	+1.2
Parsees (Zoroastrians)	1,728	300	300	300	300	300	+1	+10.9	+0.8	+11.8	+10.8
Muslims (Other Religions and religions not stated)	22	1	2	4	8	8	+1.8	+1.8	+1.8	+1.8	+1.8

that the Hindus largely predominate in the centre and south of India, and in the Madras Presidency they are no less than 89 per cent. of the population. Hindus are in the majority in Assam, Bihar and Orissa the United Provinces, the Central India tracts, Rajputana and Bombay. Muhammadans monopolize the North-West Frontier Province, Baluchistan and Kashmir and are considerably in excess in the Punjab and Eastern Bengal and Sind. They form about 28 per cent. of the population of Assam, 14 per cent. in the United Provinces and 10 per cent. in Hyderabad. The Buddhists are almost entirely confined to Burma where they are 85 per cent. of the population. The Sikhs are localized in the Punjab and the Jains in Rajputana, Ajmer Merwara and the neighbouring States. Those who were classed as following Tribal Religions are chiefly found in Bihar and Orissa, the Central Provinces and Assam, but Bengal, Burma, Madras, Rajputana Central India and Hyderabad also returned a considerable number under this head. More than three-fifths of the total number of Christians reside in South India including the Hyderabad State. The remainder are scattered over the continent the larger numbers being returned in the Punjab the United Provinces, Bengal, Bihar and Orissa Burma, Bombay and Assam. The Parsees and Jews are chiefly residents of the Bombay Presidency.

88 We have seen that in the instructions given to the enumerators in regard to the religious category of the census schedule they were told that, in the case of aboriginal tribes who are not Hindus, Musalmans, Christians etc., they should enter in the schedule the name of the tribe. These entries have hitherto been classified and tabulated under the heading "Animist" in the census tables. A natural inference might therefore be drawn by anyone consulting the tables that the category contained all those who held animistic beliefs. Such an inference would be entirely misleading. The origin and meaning of the term Animism was very fully discussed by Sir Herbert Risley in his chapter on Religion in the India Census Report of 1901 and attempts have been made in previous census reports to describe the kind of beliefs which are denoted by the name. Without entering in any detail into these discussions we may recall to mind that animism describes the attitude of those who worship or propitiate the forces and objects of nature and the spirits which they conceive to reside in natural phenomena. Animism, frequently associated with the worship of the souls of ancestors and of rudimentary deities representing the larger forces of nature forms to some extent a substantial influence among the less enlightened adherents of most religions and in India where the original beliefs of the indigenous population were essentially of this primitive character the introduction under foreign influences of the more philosophical religions has not radically changed the religious attitude of the lower illiterate classes. There is little to distinguish the religious attitude of an aboriginal Gond or Bhil from that of a member of one of the lower Hindu castes. Both are

Tribal Religions.
Meaning of the
term.

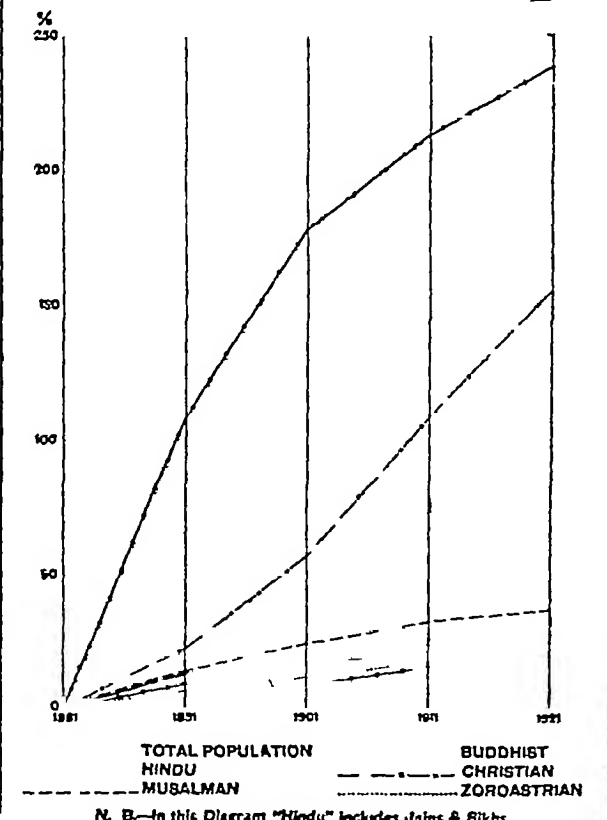
Diagram showing the PROPORTION of the POPULATION of INDIA following each RELIGION, 1921



Per 10,000 of the POPULATION

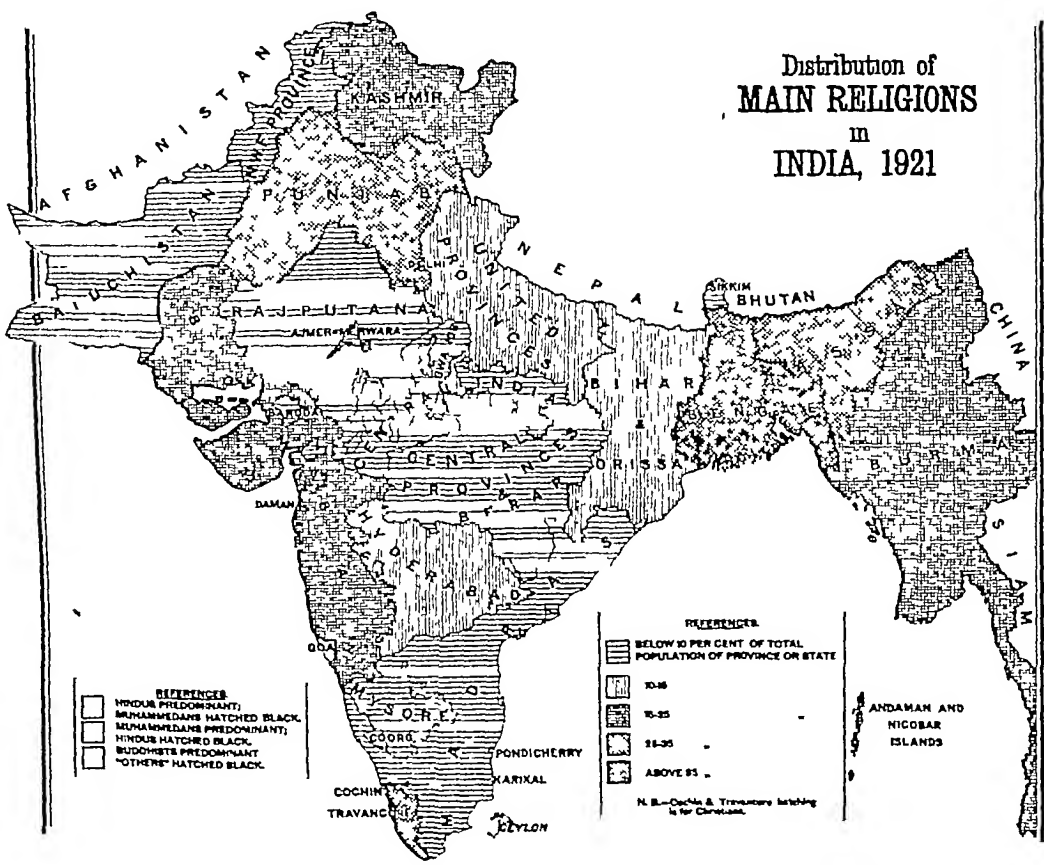
HINDU	8,858	TRIBAL RELIGIONS	309
MUSALMAN	2,174	CHRISTIAN	150
BUDDHIST	308	SIKH	103
		OTHERS	42.

INCREASE OR DECREASE PER CENT OF THE POPULATION IN THE DIFFERENT MAIN RELIGIONS--1881 TO 1921-



N. B.—In this Diagram "Hindu" includes Jains & Sikhs.

Distribution of
MAIN RELIGIONS
in
INDIA, 1921



essentially animistic and the difference lies in the fact that the one has identified his chief objects of worship with those in the Hindu pantheism and has, to a greater or less extent, brought his social and personal life into line with the requirements of the recognized Hindu system. It is obvious, therefore, that the term Animism does not represent the communal distinction which is the essence of the census aspect of religion and that, as a description of a definite religious category distinct from the other religions returned, it is distinctly misleading both in its content and its extent. For this reason I have decided to change the heading of this category to "Tribal Religions". The title at least covers with some accuracy the information which was actually obtained in the schedule, though it is inconvenient in that it cannot be resolved into a compact substantive which will describe the persons whom it includes.

By changing the heading of this category we are not, however, by any means, relieved of the difficulty in the interpretation of the figures. If the word Animism is vague in respect of what it connotes the term Tribal is not by any means definite in what it denotes. There are (1) certain aboriginal tribes, denizens for the most part of the hills and jungles in various parts of the country, large sections of which still undoubtedly stand outside even the fringe of any of the systematized religions. There are (2) others who, by constant though comparatively recent association with their more sophisticated neighbours of the plains and open country, have partially adopted their practices and methods of life. There is (3) a large mass of tribes who, by long association with Hinduism, have acquired an indefinite position on its outskirts and obtained a kind of negative recognition as Hindu outcastes. With all these the enumerator has to contend with little equipment except his local knowledge and his own personal inclinations and prejudices. His method will probably be somewhat as follows. Having first ascertained the caste or tribe to which the object of his enquiries belongs he will at once record as a Hindu a member of any of the undoubted Hindu castes, failing any clear objection. In the case of the other more doubtful classes he will receive some suggestion from those whose ambition to take a higher place in the social scale has prompted them to range themselves definitely as Hindus. Otherwise he will record them either as Hindus or under their tribal name according to his local knowledge and the personal view he is inclined to take. In the record in the schedule of this class the personality of the enumerator, then, is probably a major factor. As to what direction the bias of the enumerator will take in these cases there is some doubt. The usual view is that a Hindu enumerator would be inclined to exaggerate the well-known absorption of the aboriginal tribes into Hinduism by recording all doubtful cases as Hindus. In Assam, on the other hand, Mr. Lloyd has found indications of a disinclination on the part of orthodox Brahman enumerators to recognize the pretensions of some of the primitive tribes to Hinduism. Whatever the view taken it will obviously influence the records of the whole block, and similarly the predominant view of the supervisor who checks and corrects the enumerator's work will determine the records of the circle. In the tabulation offices the entries can be treated in a rather more systematic manner. We always find a large number of tribal names such as Chamar, Mahar, Mehtar, Chuhra, etc., entered in the religion column, indicating that the view of the enumerators was frequently on the side of their exclusion from Hinduism. These entries would, under our present system, usually be classified as Hindu in the primary tables where they belong to the third category mentioned above. For the so-called aboriginal forest tribes the entry in the schedule, either the tribal name or Hindu as the case may be, will usually be accepted, but there have been cases where, under instructions from superior officers, what seemed obviously wrong entries affecting a considerable community have necessarily to be altered. It will easily be gathered from what has been said that the statistical value of the return of Tribal Religions is exceedingly problematic and most of the Superintendents give little value to the figures. The Superintendents of Madras and the Central Provinces prefer to combine the figures of Hindu and Animists in dealing with the statistics of the main religions, and, after carefully discussing the figures of tribal religions returned for the Bombay Presidency, especially in the case of Bhils, Mr. Sedgwick remarks—"In short I suggest that our returns of Animists are *absolutely worthless*. They represent nothing and are entirely a matter of chance." While agreeing that the figures of the Tribal Religions do not afford a satisfactory basis for accurate statistical discussion I am still strongly of opinion that it is necessary to retain this category, in order to distinguish a substantial group of the population, uncertain and fluctuating though it be, who still definitely stand outside the circle of any of the main Indian communal systems.

86 The statistics showing the distribution of the Tribal Religions and their strength at different censuses will be found in Imperial Table VI and Subsidiary Table I at the end of the chapter. According to the returns they number 9½ millions and form 309 per 10,000 of the population of India. They represent a substantial proportion of the population of Assam and are numerous in the British and State tracts of Central India, the Central Provinces and Bihar and Orissa and in the hilly tracts of South India and of Burma. It will be seen from the marginal table below that there has been a drop in the figures of this group since 1911 in all the principal provinces except Central India, Rajputana and Hyderabad, the fall in the whole of India amounting to about half a million. Owing to the

Tribal Religions
Statistics.

unsatisfactory nature indicated in the discussion above of the return it is not

Proportions of 1,000 of these professing Tribal Religions at different censuses.

Province or State	1911	1921	1931
India.	11	36	80
Assam	27	78	
and Bihar	10	66	
Orissa and Orissa	4	21	84
O. and Orissa	6	26	
Madras	29	1	47
Hyderabad	29	1	
Coorg	1	1	
Barotsky	1	1	

worth while to analyze the statistics in any detail. While the aboriginal population is under ordinary circumstances exceedingly prolific, the majority of them inhabit those parts of the country which were specially exposed to the ravages of malaria and influenza, and any large increase in the number of those eligible to be returned under Tribal Religions is therefore *prima facie* unlikely

Religious movements of the Tribes.

87 I give below figures showing the classification by religion of some of the principal aboriginal tribes in different provinces of India

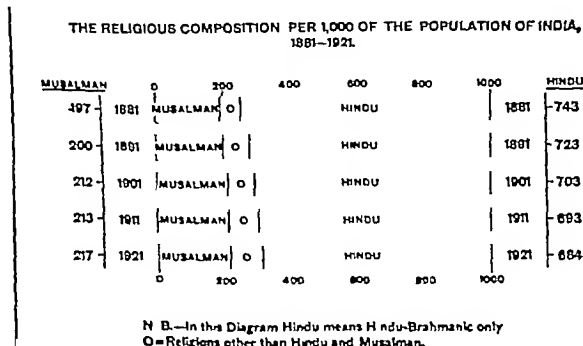
Tribe and Region.	Strength in 1921	Proportion returned as Hindu.	
		1921.	1911
Panjara. (Dowry O P Panjab, Hyderabad and Mysore)	631,277	81	68
Bhil. (Dowry, O J Baroda and Rajputana)	1,785,808	54	38
Gond. (Assam, B. and O G P U P C I and Hyderabad)	2,802,523	36	29
Ho. (Bihar and Orissa)	480,174	11	14
Kachari. (Assam)	207,206	34	26
Kandh. (Bihar and Orissa and Madras)	616,874	78	34
Kurumban. (Coorg, Madras, Hyderabad and Mysore)	855,371	90	90
Munda. (Assam, Bengal and Bihar and Orissa)	552,938	40	34
Naga. (Assam)	220,619		
Oron. (Assam, Bengal, B. & O and O P)	765,680	26	21
Santal. (Assam, Bengal and Bihar and Orissa)	2,265,282	33	23
Savara. (Bihar and Orissa, Madras and O I.)	478,608	88	64

While it is difficult to form any statistical estimate of the extent of absorption of these peoples into Hinduism or their conversion to Christianity there are in some cases indications from other sources which throw some light on the religious movements among them. In Assam Mr Lloyd while admitting defects in the record and the losses by influenza in the hilly regions, considers that there has been a real absorption of the tribes into Hinduism in the plains in Manipur and in the Northern Cachar Hills, while the spread of Christianity among the tribes of the Khasi Jaintia and Lushai Hills during the decade has been a remarkable feat of missionary enterprise. In Bihar and Orissa on the other hand, Mr Tallents writes — It seems however to be the general impression that though the number of Ammis has declined in the census returns there has been no corresponding movement amongst the tribes in the direction of Hinduism. In fact the impression is not of a marked general movement towards Hinduism amongst the aboriginal tribes but rather of increased conservatism on their part. He proceeds to discuss at some length the very interesting movement among the Oraons known as the *Tana Bhagat* movement and similar tribal movements among the Mundas, Ho Kharwars and Santals. Originating chiefly in a feeling of resentment towards the intrusion in their tribal homes of non-aboriginal landlords the *Tana Bhagat* movement began by a widespread campaign for the expulsion from their villages of unprofitable spirits, whom they considered they had wrongly been worshipping in defiance of their ancient religion. Unfortunately the crowded meetings and nightly gatherings, to which only Oraons were admitted, caused considerable alarm among the non-aboriginal population and eventually the authorities were induced to intervene. The reform movement then took on a more peaceful shape in which the underlying tendency was one towards greater purity and simplicity of life. Abstention from liquor drinking stealing and lying was enjoined and the attendance at periodic religious ceremonies was enforced. Ideals such as *Bhakti* or loving faith were undoubtedly borrowed from the Hindu and Christian religions, but the interest of the movement lies in the fact that it was not towards the adoption of any new faith but towards a revival of the true Orson religion. The *Tana Bhagat* movement may be regarded as a genuine effort to spiritualize the separatist tendency of the last few years. The religious movements among the other aboriginal tribes of the Chota Nagpur were of a somewhat similar nature. They seem however to have lost a considerable amount of their force in the later years of the decade.

88 Indication has already been given of the difficulties regarding the meaning and scope of the term Hindu as used in the census. The answer to the question "What is a Hindu?" has been discussed at length in previous census reports and attempts have been made to find some decisive criterion of what the term should denote. Interesting and useful as these attempts have been, in that they have served to focus and illuminate the difficulties of the subject, they have been for practical census purposes more or less vain. Hindu is an unsatisfactory category in the census classification of Religion. In the first place Hinduism is not only or essentially a religion. The term implies also country, race and a social organization, and there is no test or set of tests which can include all these aspects of Hinduism and be applied by the census staff for the diagnosis of a Hindu. Some idea of how wide the conception of the term Hindu can be carried may be obtained from the fact that in a recent Indian journal a suggestion was made that all Indians should call themselves Hindus, irrespective of their particular religion, there would then be Hindu Christians or Christian Hindus, Musalman Hindus, Buddhist Hindus, Sanatanic Hindus, Saivite Hindus and so forth.* This extreme territorial view of the term Hindu emphasizes an underlying feeling that, apart from those who are definitely assignable to some other religious community, every man born into a recognized Indian racial or social group has an indigenous right to be or become a Hindu of some kind, and it is on some such vague and almost negative conception as this that the census classification of Hindus has necessarily to be based. Experience has shown that any attempt to obtain a statistical return of the many different communities for which a place in the Hindu system is sometimes claimed is beyond the capacities of our census organization, though interesting information will be found in previous reports regarding the various sects, protestant, dissenting and scismatic, which exist side by side with more orthodox Hinduism. While, therefore, the correct application of the term Hindu must always be a matter of sentiment and opinion, upon which it is not the function of a Census report to pass judgment, it must be borne in mind in using the figures given hereunder "Brahmanic Hindus," that they contain alike the recognized Hindu castes either professing the orthodox school of thought or belonging to sectarian groups, Shaivites, Vaishnavites, Shaktas, Lingayats and so forth, protestant groups such as Kabirpanthis and Satnamis, who have definitely cast off some of the most intimate tenets of orthodox Hinduism, a large passive and acquiescent mass of functional and tribal castes, who are excluded from all the religious exercises and denied all the social privileges of Hinduism, and, lastly, a section of the primitive peoples of the hills and jungles, who have detached themselves from their tribal seclusion and succeeded in obtaining such social recognition from their more advanced neighbours of the plains as will justify them in adopting the title and style of Hindus†.

The Brahmanic Hindus, thus defined, form the major portion of the population of the Provinces and States of India except the North-West Frontier Province, Baluchistan, Kashmir, the Punjab, Bengal and Burma. There has been a steady decline in their proportion since the Census of 1881. This decline in the last decade has been general in all the tracts containing a large proportion of the community, except in Bombay and the Central Provinces, where their proportion has slightly risen at the expense both of Muhammadans and of the Tribal Religions. The fall is marked in Bengal where the proportion of Hindus dropped from 45 to 44 per cent, while that of Muhammadans rose from 52 to 54 per cent. While the

Hindus gain by the absorption of the Tribal communities they lose by transfer, chiefly from their lower ranks, to Christians and Sikhs and to the Arya Samaj. These losses however are of comparatively small account in the whole population and will be considered in connection with the figures of the smaller communities. Apart from the fact, which will be alluded to



* The latest definition of Hindu which I have met is that adopted by the All India Hindu Mahasabha — "Hindu means any person professing to be a Hindu or following any religion of Indian origin and includes Sanatanists, Arya Samajists, Jains, Sikhs, Buddhists and Brahmins etc."

† Some attempt to give an approximate estimate of the numbers of the various social or racial groups forming the Hindu community will be found in Chapter VI (Caste) below.

later that the Hindus are generally said to be inferior to the Muhammadans in vitality and fertility it is in the tracts in which Hindus predominate in Bombay the United Provinces and the central areas of the country that the highest incidence of influenza mortality occurred, and there is no doubt that the Hindus have in this respect come under specially disadvantageous conditions as compared with Muhammadans in the progress of their numbers. The marginal diagram above illustrates the comparative progress of the Hindu and Musalman communities.

89 The Jain religion like Buddhism is held to have been originally an offshoot from Hinduism, and many Jains still continue to consider themselves as members of the Hindu community will intermarry with Hindus and take part in their festivals. The strong revival of Jainism in the last twenty years which has been accompanied by an increasing organisation of the community as a whole and in its various branches renders it less likely that there has been confusion between the return of Jains and Hindus, but the Census Superintendents of the Punjab and Bombay still suspect the figures on this account. Of the total number of 1 178 690 Jains about 70 per cent. belong to Rajputana the Bombay Presidency and the Bombay States including Baroda. The Jains being largely traders are scattered over the whole of India. They are found in considerable numbers in the United Provinces and Central Provinces, and in Bengal they have increased from about 5 000 in 1891 to 13 000 at the present census. The Jains are rigid observers of the customs of early marriage and the prohibition of widow re-marriage and like the Hindus their proportion in the population is steadily declining. It stood at 49 in 1891 and now amounts to 37. The fall has been assisted in this decade by the fact that the majority of the Jains belong to provinces where the population in general declined. Statistics of the Jain sects are not available except in a few Provinces, but an account will be found in Appendix IV to this Report of one of the more advanced sections of the community viz. the Tempantia Sect and some notes on the recent advance in the Jain religious and social organization by the Census Superintendent of Baroda in Appendix III.

90 The Sikh religion is not sharply divided from Hinduism as regards its philosophy and religious doctrine. Sikhism was an attempt to reconcile the ancient Hindu beliefs with a purer creed which rejected polytheism, image worship and pilgrimages. It remained a pacific cult till the political tyranny of the Muhammadans and the social tyranny of the Hindus converted it into a military creed. Two of the fundamental rules required of a Sikh are that he should wear long hair and refrain from smoking, and these two distinguishing features were prescribed at the Census of 1891 as a definite criterion for the recognition of a Sikh where there was doubt. They were however abandoned in 1911 as being unsatisfactory. It was then laid down that the statement of the person enumerated should be accepted without further question and this rule has been retained at the present census. Of the total number of 3 230 000 Sikhs 3 107 000 or all but 4 per cent were enumerated in the Punjab and its States where they form 124 per mille of the population, the chief centres of Sikh population being Ludhiana and Amritsar in British Territory and Patiala and Faridkot among the Punjab States. The variation in the strength of the Sikhs from one census to another is shown in the margin.

Census.	Actual Number of Sikhs.	Increase per cent.
1891	1,813,426	—
1901	1,997,852	+ 2.9
1901	2,181,259	+ 13.1
1911	2,614,489	+ 27.2
1931	3,223,903	+ 7.4

The reason for the rapid growth of Sikhism in the last twenty years undoubtedly lies in the development among them of a strong communal feeling, their realization of themselves as a separate political community from the Hindus and the conversion to Sikhism of many of the depressed classes who formerly swelled the ranks of Hindus. We have already seen an instance of this activity in the case of the Chuharas. The Sikhs also marry later than Hindus and their widows freely remarry. On the other hand the recent friction between the orthodox Sikhs and the Hindus regarding temple management has widened the gap between those Sikhs who look upon their religion as distinct from Hinduism and those who consider themselves sectarian Hindus, and it is probable that a good many of the latter recorded themselves at this census as Hindus. Of the two large divisions of the Sikhs, the Keshdharis and Sahjdharis, the former now number about 2 millions in the Punjab and the latter 220 000. The chief increase in the number of Sikhs has been among the Keshdharis, who have risen

by over 19 per cent in the decade, the Sahjdharis having lost about half of their numbers. The former sect represents the orthodox followers of Guru Govind and, with the revival of Sikh communal feeling, has attracted the largest number of recruits from other communities, and evidently a considerable number from the more independent sects. Statistics regarding other sects of Sikhs will be found in the Punjab and North-West Frontier Province Reports, but the figures are not by any means complete as the number of unspecified entries is large.

91 Buddhism is the dominant religion of the indigenous races of Burma and of some of the tribes of the Eastern Himalayas and the tracts of Kashmir which border on Tibet. It is the official religion of the small State of Sikkim. The proportion of Buddhists per 1,000 persons of the Indian Empire has increased with the steady rise in the population of Burma. On the other hand the continuous decline in the proportions in Burma itself is due to the increasing immigration of Indians into Burma, and to this cause is added during the last decade another, viz., the comparatively low rate of natural increase among Buddhists and the high rate amongst Indians. More than three-fourths of all the Buddhists of Burma belong to the Burmese races proper. The Shans make up one-eleventh of all the Buddhists of Burma, the Karens one-twelfth and the Talaings about 3 per cent. The Buddhists of Bengal who are practically confined to the hills, where they form about one fourth of the population in British Territory and not quite one-third of the population of Sikkim, have increased in number from 155,000 in 1881 to 276,000 in 1921, the rate of increase being higher than that of the whole Province. The Buddhism of the eastern Himalayas is of Tibetan origin. Monasteries are numerous in Sikkim and Bhutan and were all founded from Tibet and maintain close connection with Lhasa, and Buddhism is the official religion of both these States. Buddhism in Burma has been held, like Hinduism at any rate in the central and southern portions of India, to constitute "a thin veneer" over the original animistic beliefs of the people. Mr Grantham has discussed this view in an interesting note which I have reproduced as an appendix to this Report. In comparing the influence of the two religions, Hinduism and Buddhism, on the lives of the people it has to be remembered that in Burma Buddhism, though of foreign origin, is the religion of a homogenous people with a common racial origin, common political traditions and a coherent social system. It has a central figure, a distinct ethical doctrine and a religious order which is definitely distinguished as such and trained for that purpose.

92 Except in comparatively small portions of the population the return of the Muhammadans presents little scope for ambiguity. The religion of Islam has a definite central figure and certain features of dogma, creed and ritual which are common to all its branches and are easily recognized whether in those born in the community or in converts. There are, it is true, communities among the Muhammadan population, chiefly among converts from Hinduism, whose religious ritual and exercises have a very strong tinge of Hinduism and who retain caste and observe Hindu festivals and ceremonies along with those of their own religion. Thus the Dudekula sect of the Madras Presidency derives its religious exercises from both Hindu and Muhammadan exemplars and the famous shrine at Nagore attracts Hindus as well as Muhammadans to its annual festival. This phenomenon, which is found practically wherever the two communities live side by side, merely illustrates the essentially primitive character of the religion of the illiterate and uncultured masses which can find expression in the ritual of any religious system that absorbs them. Thus the rigidity and intolerance of view, which is a marked feature of the religion of Islam in its purer forms, does not extend to the masses, who are quite willing to recognise and assist the efforts of their neighbours to keep on peaceful terms with the unknown powers. The matter is not one of statistical importance so long as these eclectic communities are definitely attached to one of the main religions and return themselves as of that community and this is usually the case. There are, however, a certain number of sects, chiefly in Gujarat and Sindh, whose tenets are of so indefinite a nature that they present some real difficulty in classification. These border-land sects of Bombay were described in detail in the Bombay Census Report of 1911, when they were classified as Hindu-Muhammadans in the Report and Tables. On the present occasion they have been referred to one or other of the religions wherever this was possible, as in the case of groups such as Matia, Momna, Sheikh, Molesalam and Sanghar who were classified as Muhammadans. An extreme case, however, is that of the Sindh Sanjogs, who entirely refused to enter themselves either as Hindus or Muhammadans and were classified as

others. The whole question of these border-land sects has been discussed by Mr Sedgwick in his report, further statistical information being given by him in an appendix

The Muhammadans number nearly 60 millions and form about one-fifth of the population of India. More than one-third of the community were enumerated in Bengal and rather less than one-fifth in the Punjab. In each of these Provinces they form over half of the population. In the North West Frontier Province and Baluchistan about 90 per cent of the population are Muhammadans in Kashmir over three-fourths and in Assam between one-fourth and one third. Elsewhere the Muhammadans form only a small minority of the provincial population and as we have seen in the last chapter where they are a distinct minority they are frequently town-dwellers. The distribution of the Muhammadan population has depended chiefly on historical considerations which were described in the 1911 report and need not be again discussed. It was there pointed out that while the Muhammadans of the eastern tracts and of Madras were almost entirely descend-

Statistics show by account the number of Hindus and Muslims and the areas enumerated 1881 and 1911

Province	ENGLISH POP. CENS. AREA			
	1881		1911	
	Hindus	Muslims	Hindus	Muslims
Assam	+	6	+	87
Bombay	—	—	—	—
Bihar and Orissa	—	—	—	—
C. P. & Berar	—	—	—	—
Madras	—	—	—	—
Punjab	—	—	—	—
North Frontier	—	—	—	—

ants of converts from Hindunism, by no means a large proportion even of the Muhammadans of the Punjab are really of foreign blood, the estimate of the Punjab Superintendent being about 15 per cent. The proportion advances of course as one proceeds further north west. The Muhammadans have increased in the decade by 31 per cent, as against a slightly decreasing

Hindu population. The marginal figures show the movement of the two communities since 1881 and 1881 in the principal provinces. There is little conversion now to Islam from other communities and the Muslims owe their advantage mainly to the absence of restrictions on the re-marriage of widows and the fact that premature marriage is not so common as among Hindus. Unfortunately the birth rates are not yet recorded by religion, but the death rates recorded in the margin are distinctly in favour of the Muhammadan as against the Hindu and, as the larger number of the deaths occur in infancy it is reasonable to suppose that a comparatively larger number of Muhammadan infants survive to maturity. In Bengal the bulk of the Muslims reside in the more healthy portions in the east of the province where the expansion of the general population has been greatest. On the other hand the decrease in the community shown by the Bombay figures is largely due to its preponderance in Sind which suffered severely from the influenza epidemic. Further as we have seen in Chapter II the Muhammadan is often a town-dweller and has thus received a certain measure of protection from the high epidemic mortality of the

Rate of deaths per mille.

Year	Hindus	Muslims
1911	23.4	29.3
1912	20.4	27
1913	20.0	25.4
1914	20.1	20.5
1915	20.1	13.0
1916	20.1	26.1
1917	20.7	31
1918	20.6	26.1
1919	20.4	23.6
1920	21.0	20.0

decade

93. The record of Christians at the census should ordinarily present no considerable difficulty. The community is well organized and the various branches and missions, as a rule keep in touch with their adherents. Conversion to Christianity is accompanied by a definite ritual such as baptism or its equivalent often preceded by considerable preparation while its other religious exercises are quite distinctive. There can hardly be any doubt in any man's mind as to whether he is a member of the Christian community or not though the thickness of the veneer of Christianity over the animistic ideas of the illiterate population is probably not great. The Bombay Superintendent remarks of the Hindus that— "It is well known that these Christian Hindus combine the worship of idols with the worship of the Christian Trinity figures of Hindu godlings being kept behind the altar and covered with a cloth when a priest comes to celebrate Mass." A Dr Coodier says—"though we call them Christians one has to give a very broad definition in order to include them." And there is a curious sect in the Tinnevely district of Madras the members of which claim to be Jews as well as Christians. So far then the record should be clear. On the other hand in the United Provinces and the Punjab apparently a deliberate attempt was made by

members of the Arya Samaj to induce Christian converts from Hinduism to return to their former religion. Enquiry in various villages in the former Province showed that the census record had been falsified in this respect in a considerable number of cases. Mr Lloyd believes that this was done throughout the Province and that the increase which was due to the decade was from 179,694 to 204,179 or 13 per cent, was really considerably greater and that the actual number of Christians in the Province may be about 250,000. Similar practice is reported to have been brought to the notice of the Government of the Methodist Mission in South Bihar by Hindu converts and is due to the community in the future is said to have corrected the falsified figures on the census record. The Christian community now numbers just 4½ million or 1½ per cent in India or 1½ per cent of the population. Fifty and a half per cent of Christians have returned from the Madras Presidency and the Superintendent's community census shows 52 per cent in every 1,000 of the population of the British district of Madras and a large proportion of the 27 per cent in the other 20 per cent in Travancore, where the increase during the decade was about 30 per cent. Elsewhere the Christians are scattered over the four Provinces of British India, the Punjab and Bihar and Orissa each having over one million, Bombay, Burma and the United Provinces between 200,000 and 300,000 and the North-West Frontier Province between 100 and 150 thousand. Detailed racial figures are not tallied except in a number of 176 thousand Anglo-Indians, 11½ thousand Indians and Europeans, nearly 4½ million of whom that out of every 100 Christians are said to be Indian, 3½ European and 1½ Anglo-Indian.

Statistics of the Hindu population show the growth of the community in the Provinces and States. The increase may be partly due to the conversion of Hindus or to the Muhammadans and to the converts drawn directly from the lower classes of the Hindu population and to the immigration. As Mr Lloyd remarks:

The growth of the Christian community is not a uniform one in all parts of the country. It is more rapid in some parts than in others. In the United Provinces and in the Punjab the growth is rapid and in the Madras Presidency it is slow. In the United Provinces and in the Punjab the growth is rapid and in the Madras Presidency it is slow. In the United Provinces and in the Punjab the growth is rapid and in the Madras Presidency it is slow.

With the exception then of the European and Anglo-Indians, who form a very small percentage of the Christian population and are usually resident in towns, the vast bulk of the community is generally rural and is exposed to the general conditions which determine progress in the rural areas of India. Christian converts are free from many of the restrictions which hamper the growth of other communities, such as caste, and the prohibition of the remarriage of widows, and as a large proportion of Christians live in South India, where the influence was not so virulent, the natural growth of the community was not retarded in the later years of the decade to the same extent as was that of the general population. The recorded death rate among Christians is distinctly lower than that of Hindus and Muhammadans, and the number of their children below five years old per 1,000 married women compares favourably with that in both those communities. If we assume for Indian Christians a natural growth of 5 per cent on the population of 1911 during the decade, we get a surplus of over 650 thousand additional Christians surviving on March 1921, who represent an addition of over 700,000 converts during the decade. There are now 2½ times as many Christians as there were in 1881, the increase in British territory (169 per cent) being somewhat larger than that in the States (132 per cent). There has been a steady growth in South India, the original home of the Indian Christian Church. The phenomenally high rates of increase in Assam, Bihar and Orissa, the Central Provinces and Hyderabad indicate the results of mission work among the aboriginal tribes, progress being particularly noticeable during the famine decade of 1891 to 1901. In the Punjab the growth of the European community in the last twenty years, owing to the redistribution of military forces and the establishment of Delhi as the capital, is reflected in the figures and the strength of the forces in cantonments influence the statistics in Bombay and the United Provinces. During the decade the rate of increase has somewhat declined in Madras and Cochin, but in Travancore the increase is nearly 30 per cent, which is slightly higher than in the previous decade, and the Superintendent estimates that upwards of 50,000 new converts joined the churches.

Perhaps one of the most marked features of the decade is the extraordinary progress made by Christianity in Assam. Mr Lloyd writes—"In the Khasi and Jaintia Hills a sixth and in the Lushai Hills over one fourth of the population are now Christians, in the Khasi Hills, where the movement is oldest, the increase has been only 31·6 per cent, possibly owing

to curtailment of staff and work in war time by the Welsh Calvinistic Methodists, the principal body working. The spread of Christianity in the Lushai Hills is phenomenal. There has been sort of revivalist wave over the whole Lushai population. The district has been described as a mass-movement area. The movement is due to the Welsh Mission at Ayal and in less degree to the London Baptists at Lungleh, with a snowball system of proselyting by local converts. In a district of 7 000 square miles, sparsely peopled by less than 100,000 people, there are now 97 000 Christians where ten years ago there were only two thousand. At present it is quite the fashion to be a Christian and even the Chiefs are joining the movement. At first I was inclined to cast doubt on the accuracy of the figures and suggested that zealous Christian enumerators might have made entries according to their own wishes rather than the facts. The Superintendent, however, thinks the case is rather the reverse. Mr Scott tested many entries himself and he quotes an instance of the rigorous standard adopted by the new converts: the five-year old son of Christian parents being entered as an Animist because the young scoundrel was so greedy that he failed to say his grace before meals. On the other hand a mad woman of an Animist family was entered as a Christian as she always went up to the Church and joined in when hymns were being sung. In the other hill districts the community is not yet so strong but all show very large proportionate increases. In Manipur where the Missions are working among the hill-tribes, Christians number over 4,000 against 153 in 1911."

In Bihar and Orissa a mass movement recently took place among the lower castes of the Shahabad district and the Methodist missionaries claim that the figures understate the number of converts made. But, apart from this local movement, the tribes which have supplied the largest number of converts in this Province are the Oraons with nearly 120 000, the Mundas with 94 000 and the Kharias with 31,000. As has already been seen the opening up of Chota Nagpur and the neighbouring country in the Central Provinces has brought the Oraons, Mundas and other tribes into contact with a higher standard of life and the result is growing restlessness mental and social, among those people of which the missionaries have not been slow to profit. Mass conversions to Christianity of the Oraons of the Jashpur State of the Central Provinces took place just before the census of 1911 and, in spite of the movement already described towards a revival of tribal consciousness and unity there has evidently been considerable headway made by the Christian missions of Bihar and Orissa though there has been less progress during the decade in the Central Provinces. How far this growing tribal self-consciousness will affect the progress of Christianity among these people is an interesting question for the future to decide. There are two new forces which the Christian missions will now have to recognise, the progressive organization, both social and political, of the masses in the lower grades of Indian society and the growing interest which is being taken in the depressed classes by the leaders of thought in the higher ranks of Hinduism. We have already seen some examples of the influence of one of these factors in discussing the relations between the Arya Samaj and Christianity. The Depressed Class missions, started by Hindu Societies especially in the west and south of India, have probably not yet reached a stage in which they seriously affect Christian missionary enterprise and the subject is, therefore at present outside the sphere of a census report.

Zoroastrianism.

94. The Parsis who follow the Zoroastrian religion, the ancient creed of Persia number 101 778 and of the total number 93 000 were enumerated in the Bombay Presidency and its States and Baroda. The Parsis as a whole form a self-contained community which is unaffected either by proselytism or by migration. Their increase of 2.3 per cent during the decade against a fall in the population of the Presidency is largely due to the fact that the majority inhabit Bombay City and the Gujarat Coast, where the influenza mortality was slight. Analysing the age distribution of this community Mr Sedgwick points out that while the large proportion of persons in the age groups 15 to 50 shows that their survival rate is at present high the number of children between 0.5 has steadily decreased since 1891 and is now even lower than in France. The Parsis are usually well-to-do and their economic condition approximates more nearly to western standards than that of any other Indian community. A lowering of their birth rate is not in these circumstances unnatural and their mode of life has hitherto secured them a correspondingly low death rate but the statistics suggest that the margin is not unlikely to become dangerously small.

Religious sects: Hinduism and Mohammedanism.

95. An attempt has sometimes been made at previous censuses to obtain figures of the adherents of the various sects of Hinduism and Islam. From a statistical point of view the information has been found to be incomplete in accurate and practically valueless. No general instructions were issued on the present occasion for the enumeration of sectarian distinctions and in most provinces sects were not distinguished except the two main reforming sections of Hinduism the Arya Samaj and the Brahmo Samaj. Religious developments in India during the last decade have been political social and even racial rather than denominational or doctrinal. Some brief general account however will be found in some of the provincial reports of both Hindu and Mohammedan sects but in only a few cases has tabulation of the figures been attempted and where

Sheikhs by tribe though in Tanjore many are Labbais while in Malabar practically

Province, etc.	Total Muhammadans.	SECTS OF MUHAMMADANISM.		PERCENTAGE OF	
		Sunni.	Shia.	Sunni.	Shia.
Assam	2,218,927	2,218,927	434	100	
Bombay	723,677	723,677	1,739	94	
Bengal and Orissa	21,496,114	21,496,114	2,106	93	
Bihar and Orissa	4,794,277	4,794,277	1,096	93	
Burma	4,908,063	4,908,063	11,437	94	
C. P. and Berar	902,063	902,063	11,437	94	
Madras	2,568,996	2,568,996	14,111	94	
N. W. Province	2,664,123	2,664,123	10,370	94	
Punjab and Delhi	12,964,147	12,964,147	15,907	97	
United Provinces	63,258	63,258	15,907	97	
Kashmir	2,644,811	2,644,811	17,423	94	
Hyderabad and Ajmer	1,003,111	1,003,111	20,381	96	

all persons who claim to belong to the Shia sect are either Mappillas or Labbais. The trustworthiness of the return of Shias must always be suspect as their religion allows them to conceal their sectarian identity a privilege of which, owing to the contempt and hatred with which they were frequently regarded by the Sunnis, they freely

availed themselves in the past. Mr Latimer Census Superintendent, North West Frontier Province writing in 1911 remarks in this connection —

In view of the fact that Shias are allowed by their religious tenets to deny their sect in order to avoid persecution, it is interesting to notice that I am informed by one of the senior members of the community that the Shias recorded in Peshawar are largely in excess of the actual numbers. It is suggested to me (I give the explanation for what it is worth) that the exaggeration is due to the enmity of Sunni enumerators, who if they had a grudge against any one residing in the block with which they had to deal, would be likely to record him as Shia by sect."

Rai Bahadur Lehna Singh (North West Frontier Province) however thinks that these conditions have changed and that the return of Shias is probably correct and though it is probable that the old hostility still remains among some of the more fanatical sections the extent to which sectarian enmity has been softened under modern conditions is indicated in the following passage in the Bihar and Orissa report —

For many years it was difficult and even dangerous for Shias to visit the Arabian sanctuaries, and they took to visiting the shrines of the Ahd martyrs at Kerbala instead. If they visited Mecca they used, for safety's sake to adopt the Sunni form of prayer. An interesting account received from a Shia gentleman of this province of his experience during a recent visit to Mecca and Medina shows that during his pilgrimage he experienced no such difficulty. He joined in congregations consisting of as many as 5,000 Shias in the Kaaba itself and no objection was raised by the Arabs. At Medina he found that the Governor, who was a Sunni, had a Shia assistant so that all assistance possible might be given to Shia pilgrims. On the voyage there was no reference to the eternal dispute between Sunni and Shia, though both sects were represented on board the ship. Conversation was engrossed by a dispute between the Sunnis regarding the extent and nature of the human knowledge of the Prophet. When this rapprochement is occurring between Sunni and Shia in the holy places, it is natural that greater cordiality in their relations should be found in Bihar also. The very fact that the census statistics for Shias are so inaccurate is a proof that this is so.

Other important sects of Muhammadans are the Ahmadis and the Wahabis some description of whom will be found in the North West Frontier Province Report. A number of small religious divisions are associated with the worship of particular *pirs* and shrines a natural corollary to the universal tendency towards specialisation shown in the religion of Islam as in most other religions.

99 Subsidiary Table III gives the particulars of the denominations of Christians and compares them with the figures of 1911. The accuracy of the figures depends entirely on the amount of interest taken by the missionaries at the time of the census and the assistance which they gave to the census staff. The number of Christians who returned no denomination on the present occasion is very considerable and for this reason, and because of substantial discrepancies between the census returns and the figures supplied from their books by the missions, some of the Superintendents consider the return of sects to be unsatisfactory. Mr Boag is inclined to question the Madras figures and Mr Edye refused to discuss the figures of the United Provinces at all in view of the large number who returned no sect. He remarks:—

As to the distribution by sect there is little that can be said. The recording of Christian sects is difficult, for the names can have no meaning to the ordinary enumerator. The difficulty is overcome to some extent by asking the missions, to send to their converts *slips* having the name of the sect written on them in vernacular. The missions were very dilatory in doing this and in consequence the number of Indian Christians who returned no sect is very large—nearly 28,000. Under these circumstances no conclusions can be drawn from the figures and the fact that only the Baptists, Presbyterians, and Roman Catholics show increase probably means no more than that the adherents of these sects were alone in getting their slips in good time. If the defectiveness of the sect statistics indicates that less importance is attached to sect now than ten years ago, I venture to suggest that the statistics are well kept."

SUBSIDIARY

Proportional strength of the main religions in each Province, State or

Serial Number	Province, Mal Agency	Males					Boys					Girls					Total				
		1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
	INDIA	6,941	6,961	7,004	7,061	7,038	182	94	76	87	78	27	40	40	44	17	18	18	18	18	
	Providence	6,520	6,520	6,526	7,014	7,177	84	80	80	84	82	18	28	28	23	82	80	80	80	120	
1	Alabar Maroon	3,059	7,739	3,777	8,864	8,183		12	8	4	4	875	496	418	427	880					
2	Andromeda Kibbun	8,384	8,373	8,734			41	78	180						23	878	854	752			
3	Amant	4,423	8,413	8,578	8,478	8,373						8	8		3	1		12	1		
4	Dalrymple	889	825	843			82	158	83												
5	Dangal	4,837	4,480	4,888	4,732	4,884		1				8		1				88	88	48	
6	Elbar and Oclon	8,383	8,373	8,323	8,388	8,438															
7	Elbar	7,887	1,48	881	784	7,488		1			77	111	186	123	137	78					
8	Elbar	888	81	134	888	838	4	4		8						8,881	8,881	8,881	8,881	8,881	
9	G. F. and Doron	8,383	8,383	8,373	8,344	8,388						40	38	38	38	38					
10	Coast	783	7,838	8,548	883	8,113						17		6	7						
11	Elbar	4,41	4,387	8,373	8,477	4,138	37	1,448	744	737	618	84	38	31	31	31					
12	Elbar	3,884					1,388				7										
13	Madras	8,881	8,888	8,371	8,881	8,141						8	7	8							
	H. W. F. Province	884	1,48	888	838	788	138	38	125	183	88										
14	United Province	8,194	8,184	8,323	8,888	8,377	8				1	1	18	18	8						
	Elbar and Andromeda	7,188	7,288	7,288	7,287	8,277	138	188	88	78	188	184	214	138	188	138	12	12	18	8	
	Amant State (Hant- poc)	8,881	8,81	8,884		8,881						3				8		8			
15	Elbar and Andromeda	834	288	343			74														
16	Dorlon State	8,183	8,388	8,323	8,328	8,188					883	81	877	888	81						
17	Dangal State	8,183	8,388	8,323	8,328	8,188					8					11	73	81	88		
18	Elbar and O. State	8,881	8,888	8,81	8,887	8,315					1					3	8	8	4		
19	Elbar and Andromeda	8,881	8,188	8,373	8,477	8,138					889	272	448	888	888						
20	G. F. (Agency)	8,383	8,383	8,373	8,344	8,388						74	34	121	87	84					
21	Coast State	8,881	8,888	8,371	8,881	8,141	3				125										
22	G. F. State	884	8,183	8,888	7,888	8,881						8		8	1						
23	Hydrocarbon Stat	8,344	8,887	8,888	8,841	8,887	8				13	8	18	34							
24	Karikal State	81	8,183	8,373	8,328		18	288	88	43		1	1			1	14	181	184		
25	Elbar and Andromeda	8,412	8,887	8,1	8,38	887															
26	Coast State	888	7,8	8,884	8,312	1,88					1										
27	Hydrocarbon Stat	883	817	8,323	8,373	2,19															
28	Hydrocarbon Stat	8,138	8,188	8,38	8,319	8,888					83	88	83	87	88						
29	H. W. F. Province	8,881	1,844				888	823								81					
30	Elbar and Andromeda	884	8,323	8,373	8,388	8,881	1,841	1,873	1,873	1,127	1,841		7	34	1	1					
31	Kalyptodon (Agency)	8,884	8,1	8,327	8,38	8,758		1			284	81	847	134	273						
32	Elbar and Andromeda	8,878	8,871	8,751				1								274	2,748	8,448			
33	Elbar and Andromeda	7,883	888	8,881	8,874	8,784															

This was in the instance of 3,001 persons who were shown under
NOTE - The properties of 4 kinds in substance in which it is
The Russian agents against former agents in Lower Russia only
The above 7,000 persons in the same case in 1900
The properties in the case of Agreements and 7 had some of the

SUBSIDIARY TABLE II.

Distribution of Christians by locality

PROVINCE, STATE OR AGENCY	ACTUAL NUMBER OF CHRISTIANS IN					VARIATION PER CENT (INCREASE + DECREASE)				
	1881	1891	1901	1911	1921	1911-21	1901-11	1891-1901	1881-89	1881-21
1	2	3	4	5	6	7	8	9	10	11
INDIA	4,734,964	3,576,333	3,973,241	3,234,399	1,897,834	+27-6	+32-6	+33-0	+32-6	+
Provinces	3,128,437	2,862,828	1,833,338	1,516,334	1,713,735	+21-3	+34-3	+37-6	+29-6	+
Ajmer-Merwara	8,331	8,432	3,712	2,653	3,225	+1-6	+66-3	+38-4	+30-6	+
Andamans and Nicobars	1,580	568	486	483		+180-2	+16-5	+0		
Assam	122,106	66,822	31,939	16,344	7,083	+66-5	+82-1	+113-6	+127-2	+2
Baluchistan	6,083	5,083	4,026	3,008		+21-6	+26-3	+23-6		
Bengal	146,090	129,748	108,586	82,328	72,288	+14-6	+21-7	+29-8	+13-9	+1
Bihar and Orissa	303,338	298,308	173,340	110,380	55,943	+12-1	+88-7	+86-2	+67-3	+
Bombay	278,082	268,637	250,087	170,008	145,164	+12-6	+11-6	+29-8	+17-1	+
Burma	227,106	210,081	147,825	120,823	84,219	+22-3	+42-4	+23-2		
Central Provinces and Berar	77,718	72,601	37,323	14,431	13,174	+8-9	+108-3	+66-6	+6-3	+
Coorg	3,182	3,523	3,663	3,292	3,103	-10-4	-3-6	+8-6	+7-6	
Daksh	13,320									
Punjab	323,838	189,751	66,081	48,472	28,064	+72-3	+280-0	+27-4	+72-6	+1
Madras	1,338,672	1,206,518	1,033,643	879,438	711,117	+14-2	+19-3	+16-1	+23-7	+
M. W. T. Province	13,918	6,718	8,272	5,437	5,646	+167-1	+27-4	-3-0	-3-7	+1
United Provinces	253,178	178,584	102,833	66,518	47,673	+12-1	+74-6	+78-9	+22-7	+2
Natives and Agencies	1,284,877	1,372,177	957,853	189,824	686,996	+23-2	+28-9	+23-6	+51-6	+1
Baroda State	7,421	1,202	7,081	644	771	+3-9	-6-3	+1,080-6	-16-2	+8
Central India (Agency)	9,602									
Gwalior State	1,819	9,236	8,112	6,892	7,083	+74-4	+15-3	+26-6	-15-2	+
Cochin State	202,561	233,082	198,238	173,821	136,361	+12-7	+17-6	+14-6	+27-6	+1
Hyderabad State	82,636	84,236	22,996	20,429	13,814	+16-4	+126-1	+12-6	+88-1	+2
Kashmir State	1,431	973	622	218		+67-6	+131-0	+82-6		
Mysore State	71,295	29,844	80,020	38,123	28,219	+19-2	+19-6	+21-3	+36-4	+1
Rajputana (Agency)	4,911	4,226	3,841	1,892	1,294	+18-4	+49-6	+82-6	+43-9	+2
Sikkim State	370	233	123			+29-8	+111-4			
Travancore State	1,172,804	803,878	697,237	529,911	494,842	+29-8	+29-6	+22-4	+2-7	+12

Refers to Lower Burma only

SUBSIDIARY TABLE III.

Races and Sects of Christians (actual numbers).

SECT	DISTRIBUTION BY RACES						Total		Variation Increase + Decrease—	
	EUROPEAN AND AFFILIATED RACES		ANGLO INDIAN		INDIAN		1921	1911	Actual	Per cent.
	Males	Females	Males	Females	Males	Females				
1	2	3	4	5	6	7	8	9	10	11
INDIA	121,991	50,746	56,642	56,399	22,452	2,189,869	4,753,174	3,577,958	+819,216	+23
Abyssinian					1	1	1	25	—24	—06
Anglican Communion	80,389	28,370	18,704	18,177	10,975	100,241	531,180	192,752	+40,428	+8
Armenian	197	99	10	18	82	57	1,167	1,200	+207	+22
Baptist	1,38	1,22	1,729	1,11	222,916	215,619	444,470	337,226	+107,253	+32
Congregationalist	194	1,0	1,7	2,3	62,167	9,781	123,010	130,265	—12,219	—9
Greek	122	41	12	11	27	21	237	594	—357	—60
Lutheran	214	10	184	151	119,689	120,383	210,810	218,500	+22,316	+10
Methodist	1,080	2,037	1,084	1,817	107,233	9,784	208,171	171,814	+36,201	+21
Minor Protestant Denominations	2,65	291	181	299	17,343	12,462	26,822	12,169	+14,383	+116
Presbyterian	7,098	2,268	1,01	736	127,898	115,637	254,838	181,150	+73,708	+41
Protestants (Unsectarian or Sect not Specified)	2,126	2,170	1,767	1,907	31,971	31,001	77,909	32,180	+41,729	+130
Quaker	10	10			51	181	1,076	1,215	—209	—17
Roman Catholic	21,033	11,068	23,661	28,410	87,083	807,396	1,823,070	1,180,867	+732,216	+22
Salvationist	99	100	10	11	10,787	41,881	88,922	62,407	+36,515	+70
South India United Church	84	95	0	61	72,04	32,977	67,717			
Syrian, Chaldean					1,072	894	1,926	13,780	—11,854	—86
Syrian, Jacobite	3			15	170,180	122,486	252,983	22,100	+27,799	+12
Syrian, Nestorian	42	55			50,078	55,079	112,017	75,848	+36,169	+18
Syrian, Reformed					50,078	55,079	112,017	75,848	+36,169	+18
Syrian, Romo-Syrian	1		61	53	217,038	206,816	423,905	413,142	+10,826	+3
Syrian, Unspecified	13	10			366	170	594	314	+216	+63
Sect not returned	3,414	2,133	3,078	2,476	31,164	30,639	77,904	17,954	+67,050	+323

NOTE—The category 'Indefinite Beliefs' which appeared in the corresponding table of 1911 has been excluded on this occasion from this table.

SUBSIDIARY TABLE IV.

Distribution of Christians per mille—(a) Races by Sect and (b) Sects by Race.

SECT	RACES DISTRIBUTED BY SECT				SECTS DISTRIBUTED BY RACE			
	European	Anglo Indian	Indian	Total	European	Anglo Indian	Indian	Total
1	2	3	4	5	6	7	8	9
INDIA	1,000	1,000	1,000	1,000	37	24	939	1,000
Abyssinian							1,000	1,000
Anglican Communion	610	330	87	112	204	70	726	1,000
Armenian	7				882	23	95	1,000
Baptist	16	27	98	94	6	7	987	1,000
Congregationalist	2	4	27	26	3	3	994	1,000
Greek	1				700	97	203	1,000
Lutheran	2	3	54	51	2	1	997	1,000
Methodist	35	26	45	14	30	14	956	1,000
Minor Protestant Denominations	7	4	6	6	17	18	965	1,000
Presbyterian	56	13	55	54	39	6	955	1,000
Protestants (Unsectarian or Sect not Specified)	42	33	14	15	99	50	851	1,000
Quaker					10		981	1,000
Roman Catholic	183	509	388	383	18	31	951	1,000
Salvationist	1		20	10	2	1	997	1,000
South India United Church	1	1	15	14	3	2	995	1,000
Syrian, Chaldean							1,000	1,000
Syrian, Jacobite			56	53			1,000	1,000
Syrian, Nestorian	1				1,000		1,000	1,000
Syrian, Reformed			25	24			1,000	1,000
Syrian, Romo-Syrian		1	95	89			1,000	1,000
Syrian, Unspecified					41		959	1,000
Sect not returned	31	49	15	10	73	73	854	1,000

CHAPTER V

Age

General observations.

100. The inaccuracy of the age returns of the Indian Census is proverbial and has been discussed in every census report. There is a traditional reticence regarding the mention of a person's age which probably has its origin in the same class of ideas as that which causes a taboo on the mention of names. The age, like the name is considered to be an intimate part of a man's personality which if given away might be used in some magical means to cause him injury. Whether this superstition has now any practical force is doubtful, but the fact is that few Indians know their age or have any interest in their own age or in that of others. No official record is kept of the date of births, there are no birthday anniversary fêtes, and though it is a tradition among Hindus that at the birth of a child a horoscope should be constructed it is doubtful if this is a universal practice even among the better classes whether it is or not the document is seldom consulted and is certainly not made use of in connection with the census enumeration. A good description of the average conditions under which the return of age is obtained is given by Mr. Edye (United Provinces) —

The ordinary educated Indian has very vague ideas about his own age. The uneducated Indian has practically no ideas at all. And a man who does not know his own age is unlikely to know the ages of other people. The head of the house who answered the enumerator's questions not only for himself but also for his family might have some idea of the age of his sons, especially if these attended school or had entered or hoped to enter Government service. He would have less idea of the age of his daughters very little of that of his wife, which he had never accurately known and practically none of that of the mothers-in-law and paternal aunts who happened to be quartered upon him. Enumerators were instructed to record the age as stated, if the statement appeared reasonable otherwise to endeavour to fix it by questions with reference to well-remembered events such as famines failing to obtain a clue on these lines, to estimate it as best they could and enter accordingly. It is obvious that while a man may well remember that he had just begun to follow the plough in the year of the great famine, he cannot call up similar memories vividly for his uncle or his grandmother. Again, if the head of the house has no clear recollection of past events, the enumerator has the man before him and at any rate the materials for an estimate. The uncle is not before him, but is probably well known to him a shrewd guess should be possible in this case also. The grandmother he is unlikely to have noticed, and if she happens to be in *parda*, he has never even seen her. The age recorded in this case may well miss the mark by decades. For the guessing of the age of others is not the Indian's strong point, even where he is educated and intelligent. During the period when the staff was being trained, I had my own age guessed by hundreds of supervisors and enumerators, and the estimates were seldom within five years of the truth, and varied between 16 and 60."

Concentration on certain numbers.

101 This inaccuracy of knowledge or judgment finds expression in certain definite ways in the census schedule of which the most conspicuous is the preference for certain figures, viz. those ending in the digits 0 and 5. The extent to which this plumping on multiples of 5 which is a well-known phenomenon in the age returns of all countries, is carried in the Indian Census is a matter which will be discussed more fully in the actuarial report. It is possible by an analysis of the figures to obtain a measure of the tendency to favour special numbers. In Bihar and Orissa for example in the specially selected group of 100,000 males, whose ages were tabulated for the Actuary about 25 per cent. of the ages were returned in figures ending with 0 and 18 per cent. with figures ending in 5. Mr. Sedgwick carried the analysis of the Bombay figures rather further using the "Index of Concentration" derived by the United States Census Bureau and mentioned by Whipple in his book on Vital Statistics.* This index is obtained by summing the age returns between 23 and 62 years inclusive

and finding what percentage is borne by the sum of the returns of years ending with 5 or 0 to one-fifth of the total sum. The result would vary between a minimum of 100, representing no concentration at all, and a maximum of 500, if no returns were recorded with any digits other than the two mentioned. The result is given in the marginal table taken from the Bombay report, and is compared with similar figures returned at various censuses in European countries. It will be seen that the cumulative tendency is more pronounced in India than in even the more backward countries of Europe. Apart from this particular form of concentration there is also a strong inclination to favour certain numbers such as 2, 8 and 12 and a marked preference for even over odd numbers.

102 Apart from the psychological obsession of certain digits there are other characteristic deviations from the facts of age which are peculiar to the Indian returns and can be briefly stated

(1) *Childhood* —The record of the age of infants below one year by months would obviously be beyond the scope of the Indian enumeration and an attempt to define this category by a definite name such as "infant," or its Indian equivalent, has special difficulties of its own, since the various vernacular words equivalent to infant are usually employed in a loose and ambiguous sense and can be used to describe any child still at its mother's breast. We get, therefore, by virtue of this ambiguity, of nomenclature, a large number of children, who may be anything from one month to two or three years old, tabulated in the category 0-1, with a corresponding depletion of the immediate subsequent age-periods. This misstatement is common to both sexes.

(2) *Youth* —Owing to the obloquy incurred by Hindu parents who have failed to marry their girls before puberty there is a strong inclination to understate the age of unmarried girls who have reached this age, which affects the age-period 10 to 15. On the other hand marriage and motherhood appear to convey an impression of age, and the age of young married women is more usually overstated than understated. In the case of males the period of adolescence, 15 to 20, appears to be avoided, youths being either advanced to the ages of manhood or set back to childhood. The motive in this case is not clear, but may be an instinctive attempt to avoid the awkward category which receives neither the privileges of childhood nor the dignities of maturity.

(3) *Middle life* —Unlike the experience of western countries the tendency towards understatement in middle life appears to be greater in the case of males than of females. The fact that all Indian women by that time have been married makes understatement unnecessary, whereas there are a large number of bachelors and widowers in the middle age-periods who deliberately misstate their age, especially if they are contemplating entering the marriage market and want young wives.

(4) *Old age* —The exaggeration of old age is perhaps natural in a population which matures early and has a short expectation of life. It occurs in respect of both sexes and perhaps more conspicuously in the case of old women. Whereas in England about 2 per million give their ages as over 100, the corresponding proportion in Bengal is 300 and the same tendency to exaggerate has undoubtedly affected the ages at 70 and over.

103 The results of these defects, intentional and unintentional, in the crude figures is that, before they are of any value for the construction of life tables and the deduction of birth and death-rates, the returns have to be carefully corrected and graduated by actuarial calculations. The conclusions of the actuary who has dealt with them on the present occasion are embodied in a separate report* and this report makes it unnecessary for me to deal with the age returns from this or from any other technical aspect. There are, however, other points of view from which the age tables are of interest and if we assume, as we undoubtedly may, that the various errors and misstatements are more or less constant it is possible, by combining the figures into groups of larger or smaller size,

Actuarial examination of the statistics

* The Actuarial Report was not ready when this report went to Press.

to gain some idea of the age-constitution of the population and its periodic variations. But, as the Superintendent of Burma remarks, "the figures must be regarded as showing the truth somewhat distorted and clouded if the cloud is thinned by using smaller age-groups the distortion is increased if the distortion is reduced by expanding the age-groups the essential characters of the statistics are more seriously clouded." Still, having combined the figures in age-groups we may with some confidence compare age-groups of one census with those of another and, perhaps with more caution, contrast the proportions shown in the various age-groups at any single census.

Varia-
tion in the age of str-
uction.

104 The figures of the total population of India are not tabulated by annual age-periods but the table below gives the age distribution of 10 000 males and females in the Indian population at five censuses by quinquennial periods.

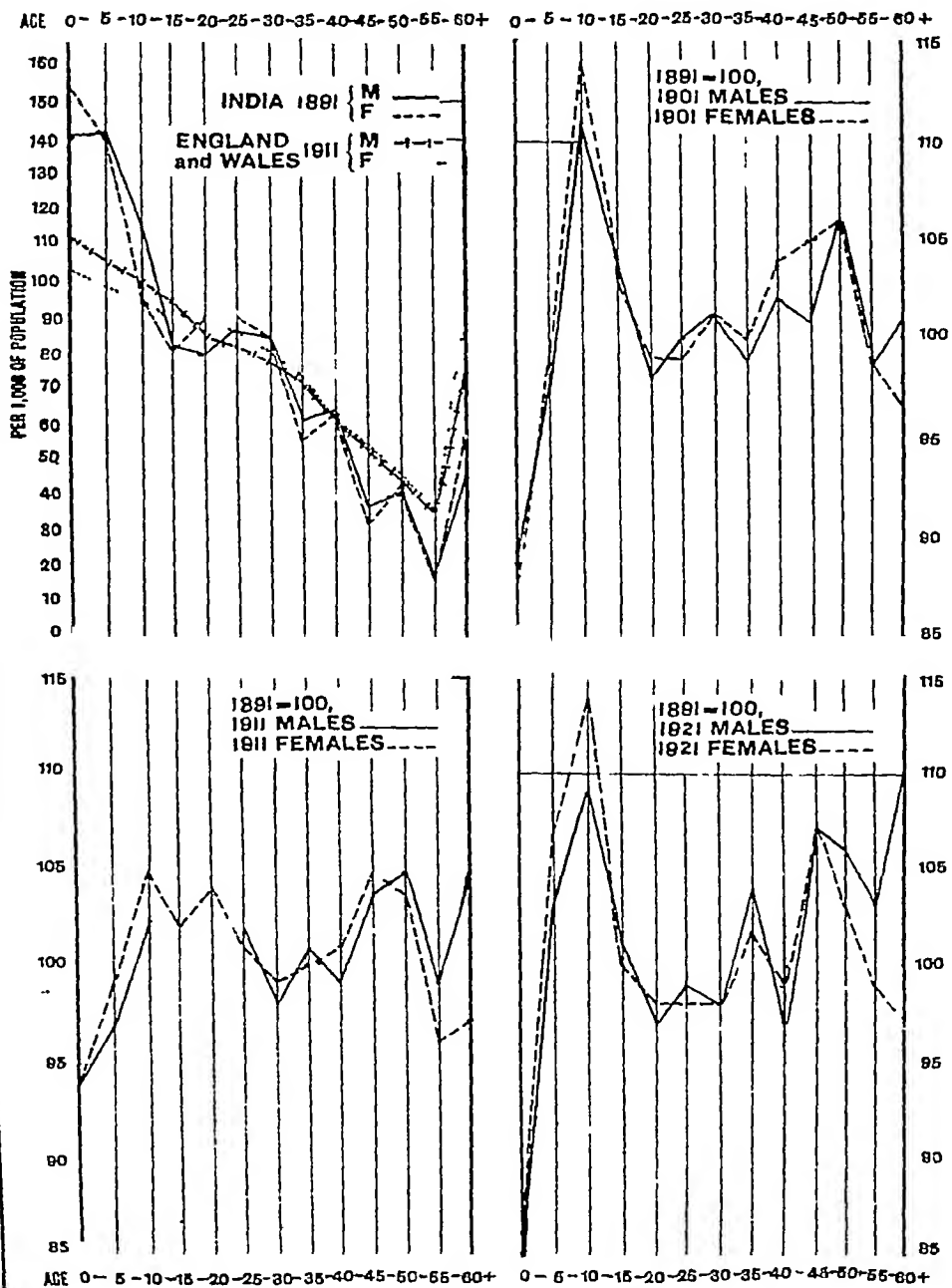
Age-group.	1871.		1881.		1891.		1901.		1911.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
0-4	1,503	1,519	1,527	1,423	1,734	1,320	1,408	1,277	1,314	1,419
5-9	1,471	1,494	1,383	1,383	1,394	1,383	1,275	1,304	1,423	1,383
10-14	1,344	1,381	1,148	997	1,344	1,300	1,138	944	1,314	1,304
15-19	817	817	848	888	888	833	836	811	81	779
20-24	779	881	817	877	787	867	879	867	798	878
25-29	808	808	808	879	879	863	879	874	808	808
30-34	873	808	873	836	848	811	842	844	808	811
35-39	836	846	873	804	804	817	811	843	807	817
40-44	811	811	811	811	818	813	818	818	843	843
45-49	807	846	807	818	879	808	808	813	844	818
50-54	434	438	438	423	437	413	411	436	438	436
55-59	183	188	77	84	77	66	79	178	181	187
60-64	366	338	337	303						
65-69	81	79	88	78	406	813	443	379	478	381
70 & over	188	180	43	178						
Mean age	24.8	24	24.7	2	24.7	26	24.6	24.9	24.8	22.2

The decennium 1881-1891 which was fairly free from any serious catastrophes or disasters in India is generally held to be a period of more or less normal growth. In the first of the four diagrams on the opposite page I have given the curves of the population, male and female according to the census of 1891 contrasting them with the age curves of the population of England and Wales in 1911. There are certain permanent factors which differentiate the character of the Indian age constitution from that of any western country: these are (a) the high birth rate in India accompanied by a high infant mortality and (b) the low expectation of life. It is not necessary to pursue the contrast into greater detail at this point but something will be said later on of the difference of character between the figures of the uncontrolled eastern populations with those of the controlled populations of western countries.

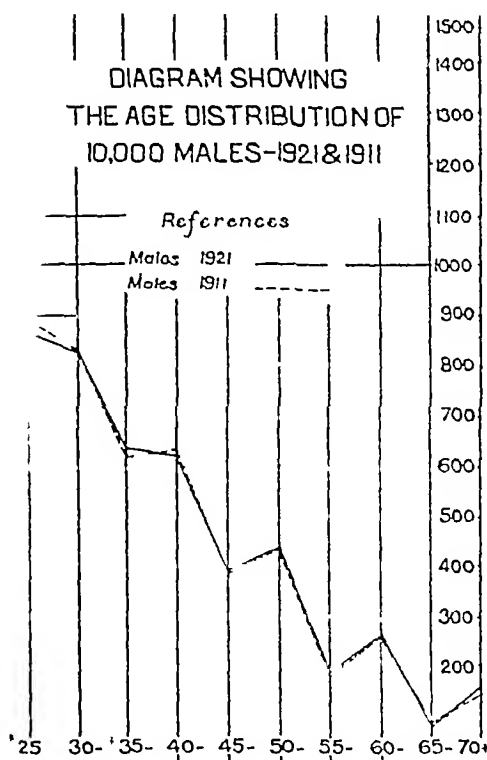
105 The other three diagrams show the deviation from that of 1891 of the age distributions of the three subsequent censuses. The variations are more marked at the extremes of life which are most exposed to mortality: the drop in the number of infants in 1901 after the famines being conspicuous.

Comparing the figures of 1901 with those of 1911 we notice a decrease in the proportions in the groups 0-4 and 15-34 and a rise in the group 5-14 and in the proportions of those over 40 years.

THE AGE DISTRIBUTION OF THE POPULATION OF INDIA AT THE CENSUSES OF 1901, 1911 & 1921 COMPARED WITH THAT AT THE CENSUS OF 1891



illustrated in the marginal diagram and more clearly in the



diagrams opposite which show graphically the figures of 1921 as a percentage of those of 1911 at each age-group. The decade has seen a reduction in the proportions of young children and the younger adults and an increase of the proportion of the adolescent and of the elder adult population. We can do no more than glance at the factors which have produced this change and which differ in importance in different parts of India. The principal are (1) the influence of famine and plague in the past, (2) the fall of the birth-rate at the

(3) the selective incidence of the influenza mortality

as accurate we should be able to follow each batch of Influence of the past

(census in each of Bombay)

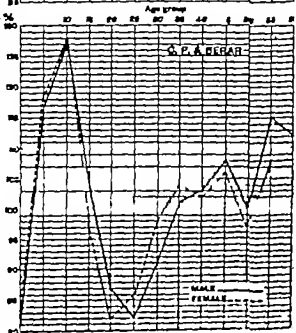
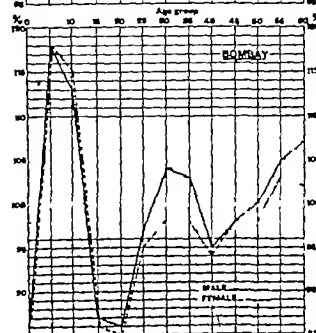
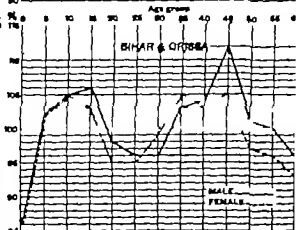
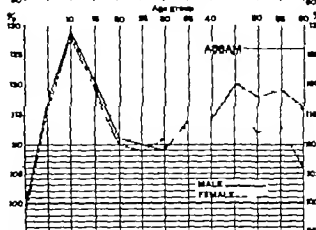
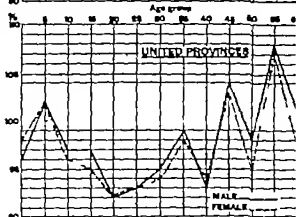
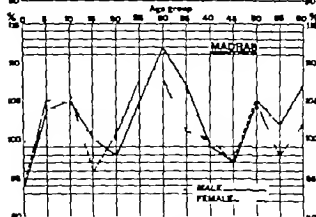
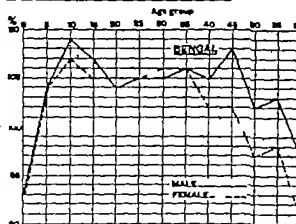
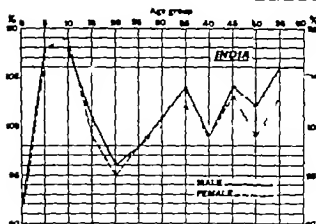
1901 to 11	1911 to 1921
	+1
	+2
	-8
	+1
	-1

the population as it progressed over successive censuses from infancy to age and watch the influences upon it of mortality and migration over the successive decades. With the inaccuracy of the Indian figures we can only obtain imperfect glimpses of this continuity but enough to see the influence of the past on the present in certain cases. The marginal table from the Bombay Report gives the

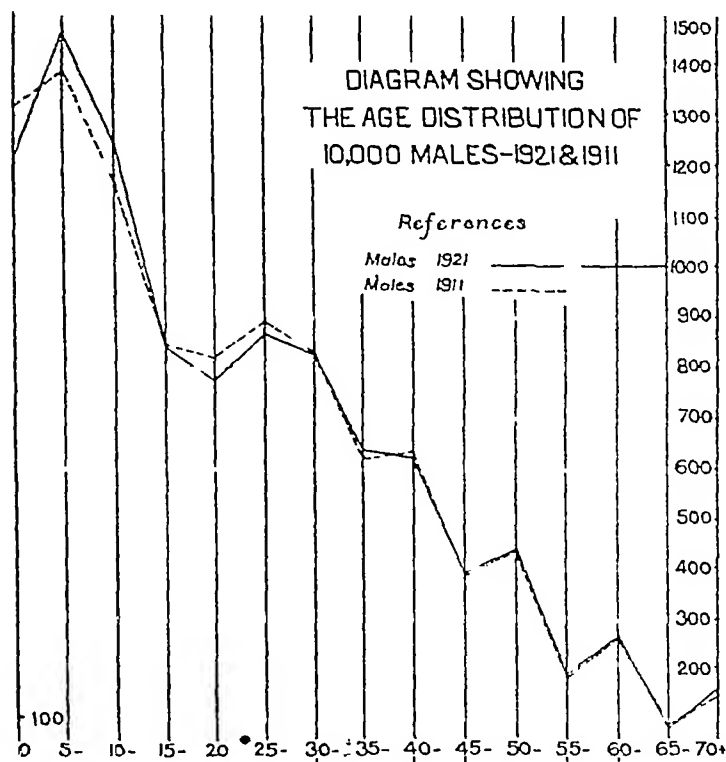
ten-year groups at successive censuses. Effect of the 1877 famine in the age-groups 20 in 1891, 20-30 in 1901 and 30-40 in 1911, while the 1899 famine is shown through groups 0-10 in 1901 10-20 in 1911 and 20-30 in 1921. Another striking illustration

from Bombay is exhibited in the marginal diagram showing figures of certain age-groups in the Panch Mahals district where the figures of 1921 are shown as a percentage of 1911. Here the whole population owing to the passing into the age group (15-40) of the two five-year groups which had been disturbed by famine, that group remains almost stationary while the groups above and below fall steeply. Indeed Mr Sedgwick attributes this legacy of the past to be the dominating factor in the decline of the Bombay population,

DIAGRAMS SHOWING THE RATIO OF THE NUMBERS OF MALES AND FEMALES IN CERTAIN AGE PERIODS IN 1921 TO THE CORRESPONDING NUMBERS IN 1911 IN INDIA AND CERTAIN PROVINCES.
(FIGURES OF 1911 = 100.)



These features are illustrated in the marginal diagram and more clearly in the



diagrams opposite which show graphically the figures of 1921 as a percentage of those of 1911 at each age-group. The decade has seen a reduction in the proportions of young children and the younger adults and an increase of the proportion of the adolescent and of the elder adult population. We can do no more than glance at the factors which have produced this change and which differ in importance in different parts of India. The principal are (1) the influence of famine and plague in the past, (2) the fall of the birth-rate at the

end of the decade and (3) the selective incidence of the influenza mortality

106 Were the age returns accurate we should be able to follow each batch of Influence of the past

Percentage increase or decrease at each census in each of the four ten year age groups (Bombay)

Age-group	1881 to 1891	1891 to 1901	1901 to 1911	1911 to 1921
0-10	+23	-15	+10	+1
10-20	-1	+10	-0	+2
20-30	+14	-7	+12	-8
30-40	+16	-2	+5	+1
Total population	+15	-5	+6	-1

the population as it progressed over successive censuses from infancy to age and watch the influences upon it of mortality and migration over the successive decades. With the inaccuracy of the Indian figures we can only obtain imperfect glimpses of this continuity but enough to see the influence of the past on the present in certain cases. The marginal table from the Bombay Report gives the

percentage of variation in four ten-year groups at successive censuses.

The table illustrates clearly the effect of the 1877 famine in the age-groups 10-20 in 1891, 20-30 in 1901 and 30-40 in 1911, while the 1899 famine is shown through age-groups 0-10 in 1901 10-20 in 1911 and 20-30 in 1921. Another striking illustration from Bombay is exhibited in the marginal table showing figures of certain age-groups in the Panch Mahals district where the figures of 1921 are shown as a percentage of the figures of 1911. Here the whole

Percentage borne by the numbers in certain age groups in 1921 to the corresponding numbers of 1911 (Panch Mahals) Numbers of 1911=100

Age group	Males	Females.
0-10	128	122
10-15	154	160
15-40	101	99
40 and over	123	120

population has risen by 16 per cent, but, owing to the passing into the

Percentage increase and decrease at each census in certain age groups (Central Provinces)

Age-group	1891 1901.	1901 1911.	1911 1921.
0-10	-20.8	+24.0	-2.1
10-20	+5.7	-14.0	+16.0
20-30	-9	+10.2	-16.8
30-40	-3.4	+8.1	-2.6
40-60			+3.0

adult group (15-40) of the two five-year groups which had been disturbed by the 1899 famine, that group remains almost stationary while the groups above and below it rise steeply. Indeed Mr Sedgwick considers that this legacy of the past famines is the dominating factor in the age constitution of the Bombay population,

even overshadowing the selective mortality of the influenza epidemic. The same influence is discernible in the figures of the Central Provinces where the infant mortality of the great famine period 1897-1900 has helped to deplete the categories of 20-30 while the high birth rate which came immediately after the famine has contributed to the increase in the adolescent categories.

Vital Statistics.

107 The special circumstances of the decade impose their influence on the population through the medium of births and deaths. A brief account was given in paragraph 12 above of the conditions under which the official record of births and deaths is made and some estimate has already been given of the probable accuracy of the records. It will be of interest to see how far these records throw light on the conclusions already reached regarding the age distribution of the population. The average birth rates of the main provinces are given in the statement below divided into four categories, the average of the period up to and including 1917 the average of the three years 1918-1920 the average of the whole decade 1911-20 and the average of the decade 1901-10. The birth rate of the first seven years

*A crude number of births per 1,000 of the population
certain periods of years.*

Province.	1911 and 1912.	1913 and 1914.	1915 and 1916.	1917 and 1918.	1919 and 1920.	Average decade 1911-20.
Assam	28	27	27	27	27	27
Bombay	37	37	37	37	37	37
Bihar and Orissa	44	41	39	39	39	41
Bengal	43	39	39	39	39	40
Berhar	37	37	37	37	37	37
Madras	37	37	37	37	37	37
N. W. F. Province	31	31	31	31	31	31
Punjab	40	43	43	43	43	43
United Provinces	41	44	44	44	44	44

though it fell in most provinces in the middle of the decade was not abnormally low and has maintained the numbers enumerated in the age-category 5-10. The serious drop in the birth rate in 1918 and its partial recovery only in the subsequent years accounts for the depletion of the group 0-5 in the census figures. The drop is specially noticeable in the Central Provinces and Berar Bihar and Orissa, Bombay and the United Provinces. There was extraordinarily quick recovery of the birth rate in the Punjab the rate rising from 39.6

in 1918 to 40.3 in 1919 and 43 in 1920. We may glance at the death rates. The incidence of mortality on the proportion at various ages is shown by the figures in Table V and illustrated by the diagrams opposite, the curves showing the percentage of the rate of 1918 on the average rates in different age-periods. The curves bring out well the adult mortality of 1918, especially in the Central Provinces, Bombay Bihar and Orissa and the United Provinces where influenza was most virulent. In Assam and Bengal the curves at the early adult periods are much less steep owing partly to the comparative weakness of the epidemic and partly to the immigration of persons in the adult categories. The age-categories 5 to 15 are always healthy and were specially immune from the death incidence of both influenza and plague.

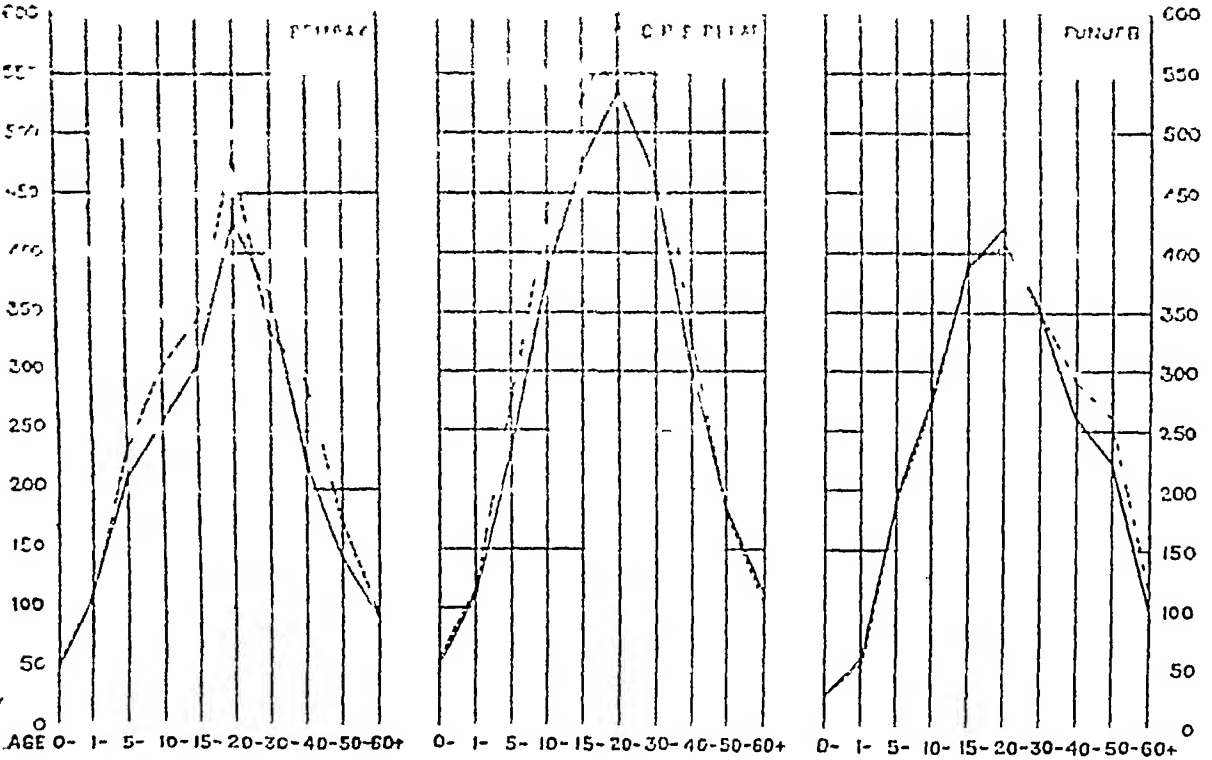
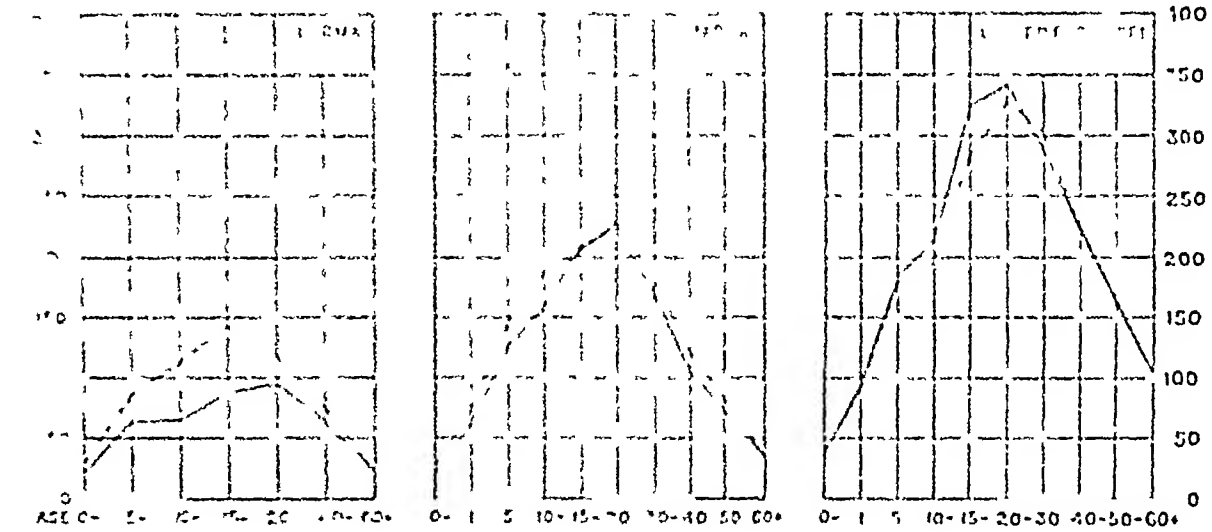
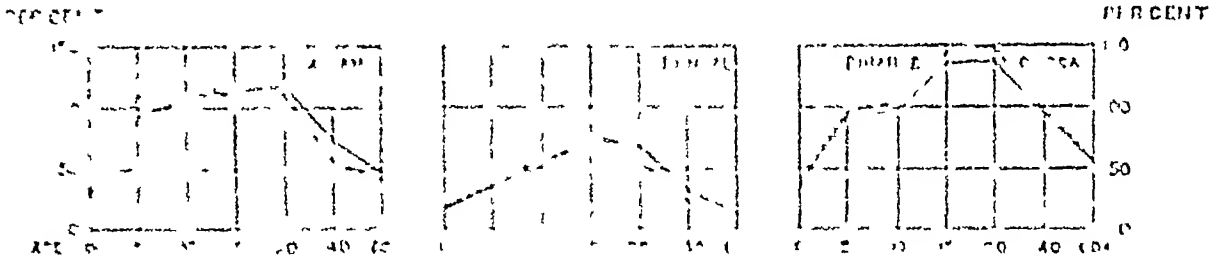
Proportion of children to adults.

108 It is usual to gauge the character of the population of India in respect of its progressiveness by showing the proportion of children (0-10) per 100 of adults in the age-groups 15 to 40 and per 100 of married women in the same age-group. This has been done in Subsidiary Table III the figures of three censuses being compared. The statistics are of considerable interest. Under ordinary conditions the rise in the proportion of children as compared with both the adults and the married women in the figures for the whole of India and for some of the Provinces might easily be taken as an indication of an increase in the fertility of marriage during the decade. The inference would, however be entirely incorrect. As we have already seen the feature of 1921 is the decline in the numbers of young children and of adults between the ages 15 and 40 especially in the tracts which were exposed to the influenza. The decrease in the numbers of young children by the fall of the birth rate in the period 1918-20 has been partially set off by the large numbers of older children, who were born under healthy conditions in the earlier part of the decade and escaped the mortality of the epidemic. But what really causes the rise in the ratio of children is the depletion of the adult categories and especially of the numbers of married women, and it is this depletion which controls the figures at any rate in those areas where the epidemic has dominated the situation. We may observe the facts exhibited clearly in the figures of Bengal, Bombay and the Central Provinces in the table below where the proportions are compared with the total increase per cent. in the decade.

INCREASE PER CENT OF THE DEATH RATE OF 1918 FOR MALES AND FEMALES IN DIFFERENT AGE PERIODS OVER THE MEAN DEATH RATES OF THE PERIOD 1911-1917 IN THE MAIN PROVINCES.

DEATH RATE OF PERIOD 1911-1917 = 0

PERCENT



Province	INCREASE PER CENT OF ACTUAL NUMBER AT CERTAIN AGES 1911 1921				PROPORTION OF CHILDREN PER 100			
	All Ages	0 10	10 15	15 40	Adults 15-40		Married females aged 15-40	
					1921	1911	1921	1911
Assam	+13.2	+8.5	+28.4	+12.5	75	78	196	199
Bengal	+2.8	-1.2	+8.3	+5.3	68	76	172	181
Bihar and Orissa	-1.2	-5.5	+4.9	-0.8	70	73	167	170
Bombay	-1.2	+1.1	+14.1	-6.4	70	65	180	159
Burma	+9.4	+3.2	+9.1	+11.8	60	65	201	211
C. P. and Berar	-0.3	-2.1	+27.4	-8.1	70	74	183	164
Madras	+2.2	-0.8	+5.5	+3.5	65	68	160	165
N. W. F. Province	+3.8	-2.1	+1.9	+7.9	74	82	206	212
Punjab and Delhi	+5.8	+10.8	+10.1	-0.1	70	69	198	179
United Provinces	-3.1	-0.3	-3.7	-5.5	66	62	161	150
Baroda	+4.6	+0.1	+42.5	-7.1	69	60	167	145
C. I. and Gwalior	-1.9	-1.4	+25.8	-9.7	70	64	177	158
Hyderabad	-6.8	-8.5	+6.9	-10.2	69	68	175	157
Kashmir	+5.0	+5.1	+7.7	+4.9	77	77	183	183
Mysore	+3.0	+8.0	-0.2	+3.8	66	64	174	163
Rajputana	-6.5	-1.2	+26.6	-16.6	74	63	189	151

What has actually happened is not that the babies have multiplied but that the number of parents has been suddenly reduced at the end of the decade, the married women having suffered a two-fold depletion, by death and by widowhood. The figures show an interesting comparison between the tracts which were respectively most and least exposed to influenza and the point illustrates the dangers of drawing any conclusions regarding comparative fertility from proportions of this kind, where the statistics are largely influenced by a concentrated and selective mortality, and the census only gives us, as it were, one photograph arbitrarily picked out of a continuous reel.

109 A great deal of attention has been given in recent years to the study of infant and child mortality. The subject is one which can only be briefly touched on in a report of this kind, but it is so intimately bound up with the population growth that some discussion of it is inevitable in considering the factors which govern the figures of the census. The death-rate of infants (i.e. children below one year of age) is usually calculated per 1,000 births in the year and the expression "infant death-rate" will be used in this sense. The recent infant death-rates in some of the countries in different parts of the world are given in the margin. Infant mortality has been steadily falling in most countries since 1881 the decline between the periods 1881-1885 and 1900-1910 being 24.6 per cent in France, 15.8 per cent in England, 32.7 per cent in Switzerland, 20 per cent in Denmark and 37.6 per cent in the Commonwealth of Australia. Studies of statistics of countries of the world show that there is a close correlation between the rate of infant mortality and the size of the family owing to two distinct sets of factors, physical and economic. On the one hand the vitality of the mother and through her the life of the child appear to be affected by the age at which child-bearing begins the number of births (or pregnancies) and especially the spacing of births on the other hand the health of the infant is closely allied with the circumstances frequently associated with large families, i.e. poverty, congestion mal-nutrition, unsanitary surroundings and the improvidence and ignorance of the parents. Large families and a concomitant wastage of infant-life seem to be

Chile	315
Russia	245
Hungary	204
Jamaica	191
Ceylon	189
Prussia	168
Japan	159
Serbia	154
Italy	153
Belgium	141
Ontario	127
France	126
United States	124
England and Wales	117
Finland	117
Switzerland	115
The Netherlands	114
Scotland	112
Denmark	108
Ireland	94
Sweden	78
Australian Commonwealth	78
Norway	70
New Zealand	70

the special characteristics of a backward people and of people in the less economically favoured classes. The average rate of infant mortality in India (British districts) and the provinces is given in the statement in the margin with the rate for 1918 the year of the influenza epidemic. In the whole of British India the infant death rate amounts to about one-fifth of the total death-rate for all ages and about one-fifth of the children die before the age of one year. The ratios of deaths vary in different provinces the birth rate being an important factor. Thus they are especially high in the United

Infant mortality per 1,000 children born alive.

Province	Average of deaths recorded per 1,000.		1911.	
	Male.	Female.	Male.	Female.
India	81.1	130	87.9	808
Bombay	11.8	80	126	507
Bengal and Orissa	21	77	21.5	323
Bombay	130	130	303	230
Bombay (Lower)	31	32	32	237
Upper	44	211	261	238
East Bengal	27	36.3	41.9	27.9
Madras	64	77	277	233
N. W. Province	73	43	43	214
Punjab	273	213	204	264
United Provinces	120	213	214	230

Provinces and Central Provinces where the birth rate is high and low in

Madras which has a lower general birth rate. The recorded rates in some of the cities are phenomenally high but may owing to the defective reporting of births be somewhat exaggerated. After noticing the effect of epidemic diseases on the death-rate of children the Sanitary Commissioner of Bombay writes as follows regarding infant mortality in Bombay —

It should accordingly be borne in mind that whilst some 50 per cent. of the deaths are due to avoidable causes such as ignorance and neglect on the part of the mother and insanitary homes, the remainder are due to the epidemics of infectious diseases which are not affected by the special measures usually adopted for the reduction of the infantile death-rate. The proportion of poor persons among the Parsis is comparatively small and the standard of education among them being high, it may be assumed that the bulk of Parsi infants are registered at birth and yet their infantile mortality amounted to 199 deaths per 1,000 births. Since this rate prevails among the better classes in Bombay the fact has got to be faced that for the City as a whole, including as it does an unduly large proportion of the very poorest class, the infantile mortality cannot, after every allowance has been made for various sources of fallacy be fairly estimated at less than 500, which means that of every two infants born, one has to die before reaching the age of 12 months.

Special causes contribute to the high mortality of infants in India. Owing to the custom of early marriage cohabitation and child birth commonly take place before the woman is physically mature and this combined with the primitive and insanitary methods of midwifery seriously affects the health and vitality of the mother and through her of the child. Available statistics show that over 40 per cent. of the deaths of infants occur in the first week after birth and over 60 per cent in the first month. If the child survives the pre-natal and natal chances of congenital debility and the risks of child birth it is exposed to the dangers of death in the early months of life from diarrhoea or dysentery.

110 The age distribution in each of the main religious communities for five censuses is given in Subsidiary Table II at the end of the chapter. The table below reproduces some of the principal figures of the last two censuses.

Religion.	Year.	Proportion of males in certain age-groups in 1921 and 1911.					Mean p.
		0-4	5-15	15-40	40-80	70 & over.	
Hindus	19*1	117	208	377	108	50	23.1
	1911	120	243	407	107	45	21.9
Mahomedans	19*1	123	243	387	110	51	24.1
	1911	140	272	383	119	50	23.9
Tribal	1921	128	203	379	123	41	23.1
	1911	164	263	344	110	36	22.9

Age Distribution by Religion and caste.

The figures are in conformity with the experience of previous censuses regarding the general difference in age distribution. The Tribal aborigines, among whom marriage after puberty is usual and the re-marriage of widows is freely practised, are a younger community than the Hindus and Muhammadans, having a large proportion in the early age-categories, and are short-lived. The Muhammadans also have a larger proportion of young children than the Hindus, whose social customs are less favourable to rapid growth. In point of longevity there is little difference between Muhammadan and Hindu males but Hindu women appear to live longer than their Musalman sisters. The age distribution of the Christians is very similar to that of the Muhammadans, but, partly owing to the special character of the foreign community which they include, the former have a higher proportion of adults and fewer in the old age-groups. It will be noticed that the changes since 1911 in each case accord with the characteristics which we have found in the general population, viz., a decrease in the proportions of the very young and of adults between 15 and 35 and a marked rise in the number of those between 5 and 15. The change is most noticeable in the Tribal community which came strongly under the influence of the two principal factors, the legacy of the famine of 1900 and the selective mortality of the influenza epidemic. The age distribution of the Parsi community presents an interesting study. The Parsis have a very high survival value, but though their numbers have so far been increasing the proportions in the early age-categories have been steadily diminishing from census to census. Their age-grouping according to Sundburg's categories* is now 0-15, 27, 15-50, 57, 50 and over 16, and their general age distribution is at the present time more unfavourable than that of any European country except France. The census figures offer a warning to this community, whose conduct of married life is probably more akin to that of western countries than is that of any other community in India. In a population so disturbed by regional factors as that of the present census it would be dangerous to draw any inferences from the age distribution in different castes. Such statistics as are available appear to confirm the general conclusions drawn from previous experience that the lower strata of the community have a higher proportion in the younger age-periods and that longevity is a privilege of the higher castes. But the individual figures display puzzling inconsistencies, for example, we find the second largest proportions of children aged 0-5 in Madras among the Kanarese Brahmans, while the proportions in the higher categories differ inexplicably in the case of Tamil and Telugu Brahmans in that Presidency.

111 The mean age of the population in various categories and at different censuses is given in the statements at the end of the Chapter. I do not propose to discuss these figures because (1) I am not satisfied that the calculations on which they are based (including methods of smoothing the crude figures) are sufficiently uniform at different censuses to admit of any trustworthy comparison of the resulting figures and (2) because the differences in the mean age are in any case merely the result of factors which have already been discussed in this Chapter. The mean expectation of life, which is a different measure altogether, belongs to that aspect of the age statistics which is being dealt with in the Actuarial report.

112 It will be of interest to examine the age division of the population in larger categories in accordance with Sundburg's well-known theories as to the balance of the population at different age groups. Sundburg finds that half the population is contained in the categories from 15 to 50 and remains steady, while the fluctuations in the numbers in the young and old categories respectively indicate the progressive, stationary or regressive nature of the population. The typical groupings are given together with figures for India and some of its Provinces and of some other countries in the table following.

Type	Proportion per 1000 of the population of different classes in certain age periods		
	0-15	15-50	50 and over
Typical—			
Progressive	100	700	100
Stationary	30	700	170
Regressive	200	700	200

* See next paragraph.

Type.	Proportion per 1,000 of the population of different countries in certain age-periods.		
	0-15.	15-50.	50 and over.
<i>Countries—</i>			
England and Wales 1911 (males)	303	534	100
United States of America (population)	321	538	141
Italy (—do—)	339	471	180
Union of South Africa (—do—)	397	507	96
India (males) { 1921	383	483	113
{ 1911	388	503	109
Bengal and Bihar and Orissa (males) { 1921	403	500	96
{ 1911	411	423	97
Madras (males) { 1921	383	490	128
{ 1911	389	487	124
Bombay (males) { 1921	393	501	107
{ 1911	373	514	103
C. P. & Berar (males) { 1921	416	471	113
{ 1911	396	499	106
United Provinces (males) { 1921	378	506	117
{ 1911	373	514	113
Burma, Buddhist (males) { 1921	376	468	126
{ 1911	393	483	122

The Indian figures are the result of factors which differ essentially from those in western countries, viz. a higher birth rate tempered by a high infant death-rate, a lower expectation of life and greater fluctuation in the adult age-categories owing to famine and epidemics. There is, however, a general conformity to Sundbörg's standards in the different types of population and while we discern in the comparative figures of this and the last census an indication of the tendencies which have already been discussed, viz. a decline in the proportion of the adults and a corresponding increase in the other categories, each province probably has a more or less distinctive standard—the result of regional or racial influences—which persists through the change. The distributions all appear to be of the progressive type, as measured by western standards, and would undoubtedly be deemed as such (apart from the periodical calamities to which Indian populations are specially liable) though it is perhaps, doubtful whether these standards exactly apply to eastern conditions. The depletion of adults and specially of young married women makes the prospect of an immediate rise in the birth rate unlikely. But the adolescent age-categories are well filled and the age constitution is favourable under ordinary circumstances to an advance in the rate of growth in the later years of the present decade.

SUBSIDIARY TABLE I.

Age distribution of 10,000 of each sex in India and the main provinces.

Age	1921		1911		1901		1891		1881	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7	8	9	10	11
INDIA										
TOTAL	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0-1	286	300	320	330	268	270	320	347	263	275
1-2	138	150	161	170	103	175	173	183	220	237
2-3	230	257	271	293	274	287	237	319	242	271
3-4	271	311	294	329	276	303	318	354	285	329
4-5	277	298	281	294	276	288	305	319	293	307
Total 0-5	1 202	1 316	1 327	1 433	1 254	1 339	1 409	1 527	1 318	1 419
5-10	1 471	1 494	1 383	1 383	1 394	1 882	1 428	1 390	1 432	1 383
10-15	1 245	1 081	1 105	997	1 204	1 082	1 139	940	1 214	1 006
15-20	642	815	648	826	806	835	835	811	811	779
20-25	775	831	822	930	787	892	802	897	799	905
25-30	865	885	806	900	870	895	870	904	806	923
30-35	825	833	820	885	848	851	842	846	885	881
35-40	630	505	622	550	609	557	613	555	587	527
40-45	621	621	634	631	649	652	638	626	642	645
45-50	392	346	380	338	370	339	300	323	344	318
50-55	434	438	432	443	437	452	411	426	436	461
55-60	185	168	177	164	177	169	179	170	161	167
60-65	268	298	257	306	406	555	462	573	475	591
65-70	81	79	83	75						
70 and over	190	180	145	175						
Mean Age	24.8	24.7	24.7	24.7	24.7	25.1	24.4	24.9	24.5	25.2
BENGAL, BIHAR AND ORISSA										
TOTAL	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0-1	280	297	316	320	285	291	317	333	232	233
1-2	109	116	137	143	138	150	141	152	235	250
2-3	225	253	282	310	297	323	293	323	292	322
3-4	282	326	312	351	314	351	335	373	351	384
4-5	284	302	295	308	293	306	307	318	320	321
Total 0-5	1 186	1 294	1 342	1 443	1 327	1 476	1 393	1 499	1 430	1 510
5-10	1 580	1 583	1 561	1 538	1 521	1 490	1 556	1 474	1 555	1 445
10-15	1 274	1 052	1 209	904	1 247	1 015	1 219	974	1 139	901
15-20	870	923	840	890	856	890	818	837	767	705
20-25	758	904	730	903	752	884	702	827	711	842
25-30	902	935	909	933	898	905	840	894	882	935
30-35	801	793	806	777	705	778	808	819	800	836
35-40	676	590	657	550	625	551	645	566	630	551
40-45	588	559	573	547	598	584	627	609	633	633
45-50	398	389	370	328	372	330	385	318	353	316
50-55	367	371	367	334	362	406	394	410	409	441
55-60	170	163	170	169	163	169	167	163	163	166
60 and over	415	494	437	535	449	567	466	605	478	639
Mean Age	24.0	24.0	24.4	24.5	24.3	24.5	24.0	24.8	24.2	25.2
BOMBAY										
TOTAL	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0-1	283	304	331	355	296	314	337	362	276	291
1-2	132	149	175	190	150	164	164	180	190	210
2-3	237	274	295	330	252	276	300	342	233	252
3-4	257	304	291	331	252	277	314	358	254	283
4-5	283	314	288	307	287	303	320	339	292	305
Total 0-5	1 182	1 345	1 330	1 519	1 147	1 234	1 435	1 557	1 235	1 347
5-10	1 494	1 581	1 521	1 528	1 413	1 426	1 474	1 380	1 460	1 432
10-15	1 236	1 083	1 084	925	1 225	1 148	1 003	886	1 208	1 100
15-20	739	909	843	791	807	803	753	753	800	820
20-25	756	843	881	971	807	894	840	935	865	933
25-30	932	911	960	940	945	926	941	932	951	946
30-35	694	673	660	674	688	681	680	672	661	647
35-40	670	638	655	667	653	662	621	552	623	670
40-45	616	634	649	663	623	649	629	636	615	607
45-50	369	354	395	352	378	356	338	319	401	417
50-55	436	450	435	449	403	421	421	421	331	417
55-60	184	163	175	165	176	163	163	140	170	193
60-65	265	304	244	293	374	473	426	542	337	453
65-70	76	73	63	72						
70 and over	123	147	110	130						
Mean Age	24.8	24.7	24.1	24.0	24.2	24.5	24.0	24.2	23.6	24.1

SUBSIDIARY TABLE II.

Age distribution of 10,000 of each sex in each main religion.

AGE AND RELIGION	1921		1911		1901		1891		1881	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7	8	9	10	11
HINDU	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0-5	1 165	1 270	1 293	1 888	1 206	1 286	1 367	1 484	1 277	1 376
5-10	1 442	1 401	1 836	1 332	1 361	1 346	1 400	1 372	1 400	1 354
10-15	1 237	1 073	1 151	984	1 208	1 082	1 134	938	1 220	1 011
15-20	835	770	851	806	871	814	831	782	821	760
20-40	3 189	3 200	3 216	3 276	3 167	3 229	3 169	3 234	3 216	3 282
40-60	1 070	1 037	1 078	1 042	1 082	1 076	1 035	1 096	1 001	1 012
60 and over	503	580	480	573	455	567	464	594	465	597
Mean Age	25.1	25.2	24.9	25.2	24.0	25.5	24.6	25.2	24.6	25.4
MUSALMAN	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0-5	1 282	1 442	1 397	1 550	1 380	1 405	1 545	1 690	1 415	1 524
5-10	1 554	1 628	1 520	1 548	1 509	1 510	1 516	1 469	1 528	1 480
10-15	1 283	1 077	1 208	1 015	1 261	1 068	1 131	925	1 107	976
15-20	837	851	833	872	840	800	847	888	777	800
20-40	3 020	3 100	3 047	3 123	3 010	3 007	3 040	3 136	3 023	3 132
40-60	1 493	1 378	1 403	1 395	1 500	1 430	1 471	1 306	1 545	1 518
60 and over	507	455	490	497	494	522	451	506	515	590
Mean Age	24.1	23.3	23.9	23.3	24.1	24.0	23.7	23.8	24.3	24.6
CHRISTIAN	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0-5	1 280	1 301	1 306	1 401	1 290	1 449	1 347	1 551	1 266	1 457
5-10	1 982	1 403	1 314	1 411	1 984	1 479	1 808	1 421	1 293	1 450
10-15	1 261	1 246	1 190	1 178	1 283	1 244	1 122	1 111	1 127	1 188
15-20	917	928	882	945	865	803	869	922	823	884
20-40	3 103	3 114	3 357	3 132	3 209	3 090	3 485	3 147	3 722	3 208
40-60	1 501	1 406	1 406	1 398	1 483	1 304	1 468	1 389	1 383	1 394
60 and over	457	452	420	445	396	430	401	459	370	469
Mean Age	24.2	23.4	24.0	23.3	24.0	23.4	24.2	23.6	24.2	23.8
TRIBAL	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0-5	1 362	1 457	1 040	1 724	1 370	1 440	1 544	1 687	1 266	1 457
5-10	1 696	1 680	1 883	1 621	1 585	1 515	1 718	1 642	1 293	1 450
10-15	1 280	1 120	1 099	960	1 324	1 151	1 240	1 054	1 127	1 188
15-20	770	799	753	802	872	898	744	763	823	884
20-40	2 035	3 117	3 085	3 234	3 080	3 196	2 890	3 068	3 722	3 208
40-60	1 549	1 335	1 455	1 312	1 453	1 383	1 450	1 318	1 383	1 394
60 and over	408	453	385	447	337	408	405	473	370	469
Mean Age	23.4	23.2	22.9	22.8	23.2	23.3	22.8	23.0	24.2	23.8

SUBSIDIARY TABLE III.

Proportion of children under 10 and of persons over 60 to those aged 15-40, also of married females aged 15-40 per 100 females.

PROVINCE STATE OR AGENCY	PROPORTION OF CHILDREN BOTH SEXES, PER 100						PROPORTION OF PERSONS OVER 60 PER 100 AGED 15-40						NUMBER OF MARRIED FEMALES AGED 15-40 PER 100 FEMALES OF ALL AGES.		
	Persons aged 15-40			Married Females aged 15-40			1921		1911		1901		1921	1911	1901
	1921	1911	1901	1921	1911	1901	Males	Females	Males	Females	Males	Females			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
INDIA.	69	68	67	174	167	167	13	14	12	14	12	14	32	34	33
Provinces.	68	69	69	172	169	170	13	14	12	14	12	14	33	33	33
Ajmer Merwara	62	58	38	164	144	100	10	13	8	11	6	9	34	30	28
Assam	75	78	73	195	197	192	10	9	10	10	9	9	32	33	33
Bengal	68	73	73	172	181	182	10	10	11	12	11	13	34	34	33
Bihar and Orissa	70	73	71	165	168	164	12	15	12	16	12	16	33	33	33
Bombay	67	64	65	174	169	166	11	13	10	12	10	12	33	35	33
Burma	60	65	64	201	211	206	13	15	14	16	13	16	25	26	26
Central Provinces and Berar	78	73	62	180	180	149	15	18	12	15	9	12	32	36	34
Coorg	52	45	48	171	160	164	7	10	5	8	5	7	31	32	32
Madras	65	68	68	160	165	170	15	15	15	16	14	16	32	32	31
N. W. F. Province	77	82	77	206	212	205	16	15	16	13	13	12	32	32	32
Delhi	54	76	70	150	198	183	18	17	15	15	16	15	32	34	34
Punjab	77	77	69	169	161	153	13	15	12	14	12	15	34	35	34
United Provinces	66	62	64	161	150	153	13	15	12	14	12	15	34	35	34
States and Agencies	72	67	60	182	162	157	13	14	11	13	10	12	32	34	33
Assam State	78	88	82	217	232	209	15	16	14	15	16	17	26	27	29
Baroda State	69	60	50	167	145	133	11	13	8	10	6	9	33	38	34
Bengal State	72	74	73	197	207	208	10	8	11	10	11	10	32	33	31
Bihar and Orissa States	70	70	78	189	189	190	7	10	8	11	9	11	31	33	32
Bombay State	60	68	60	160	160	153	12	15	10	12	7	10	31	36	34
Central India (Agency)	71	70	64	176	177	158	10	13	8	11	7	9	33	33	33
Gwalior State	60	64	49	160	160	199	11	13	11	13	11	12	32	33	33
Central Provinces State	87	84	73	203	188	184	11	14	9	12	7	10	32	35	33
Hyderabad State	69	68	62	175	157	167	16	17	14	15	12	13	31	35	33
Kashmir State	77	77	77	183	185	180	18	15	17	14	16	15	34	34	33
Madras State	65	66	64	177	170	166	11	11	11	12	10	11	30	33	32
Mysore State	66	64	75	174	163	193	16	16	15	16	14	17	31	31	29
Punjab State	70	63	62	184	163	155	18	16	14	14	1	15	33	35	35
Rajputana (Agency)	74	63	49	180	151	132	12	14	10	12	9	11	31	37	34
Sikhim State	67	72	62	180	186	157	16	17	14	17	10	13	29	31	31
United Provinces State	62	66	60	145	152	140	12	14	12	14	10	13	35	36	37

SUBSIDIARY TABLE IV

Variation in Population at certain age-periods.

PROVINCE, STATE OR AGENCY.	Period.	VARIATION PER CENT. IN POPULATION (INCREASES + DECREASES—)						
		All ages.	0-10.	10-15.	15-20.	20-25.	25 and over.	
	1	2	3	4	5	6	7	8
INDIA	1881-1901	+ 11.3	+ 14.1	+ 4.3	+ 10.9	+ 9.7	+ 9.0	
	1891-1901	+ 1.4	+ 5.1	+ 14.0	+ 2.3	+ 5.2	+ 0.3	
	1901-1911	+ 6.6	+ 9.7	+ 1.7	+ 7.3	+ 5.1	+ 9.0	
	1911-1921	+ 0.9	+ 0.1	+ 8.5	+ 1.0	+ 1.1	+ 3.1	
	1921-1931	+ 17.7	+ 30.1	+ 55.5	+ 4.0	+ 13.2	+ 34.2	
Ajmer Merwara	1881-1901	+ 13.1	+ 44.8	+ 8.4	+ 5.1	+ 4.3	+ 34.2	
	1901-1911	+ 5.1	+ 23.8	+ 30.0	+ 0.8	+ 1.7	+ 20.0	
	1911-1921	+ 1.2	+ 4.4	+ 37.3	+ 10.9	+ 1.3	+ 7.3	
	1921-1931	+ 18.8	+ 14.1	+ 23.5	+ 10.4	+ 11.4	+ 9.8	
	1931-1941	+ 7.4	+ 4.2	+ 7.1	+ 13.2	+ 7.0	+ 9.7	
Assam	1901-1911	+ 19.2	+ 19.8	+ 6.8	+ 13.4	+ 16.4	+ 19.6	
	1911-1921	+ 13.2	+ 6.8	+ 23.4	+ 12.0	+ 15.4	+ 11.2	
	1921-1931	+ 7.8	+ 9.0	+ 11.4	+ 7.0	+ 18.4	+ 19.7	
	1931-1941	+ 7.7	+ 6.1	+ 14.3	+ 8.6	+ 6.1	+ 0.4	
	1941-1951	+ 6.0	+ 9.2	+ 8.4	+ 10.1	+ 3.0	+ 0.8	
Bengal	1911-1921	+ 8	+ 1.2	+ 6.3	+ 5.2	+ 2.5	+ 8.0	
	1921-1931	+ 6.4	+ 3.4	+ 18.0	+ 5.2	+ 7.0	+ 1.0	
	1931-1941	+ 1.1	+ 2.6	+ 1.4	+ 3.4	+ 0.3	+ 1.0	
	1941-1951	+ 3.5	+ 5.0	+ 0.3	+ 3.4	+ 0.7	+ 2.7	
	1951-1961	+ 1	+ 5.5	+ 4.9	+ 0.4	+ 2.4	+ 5.4	
Bihar and Orissa	1881-1901	+ 18.8	+ 23.3	+ 0.5	+ 13.0	+ 20.8	+ 37.5	
	1901-1911	+ 5.8	+ 15.2	+ 19.4	+ 4.1	+ 3.4	+ 17.4	
	1911-1921	+ 6.4	+ 10.4	+ 13.0	+ 7.7	+ 9.8	+ 16.8	
	1921-1931	+ 1.3	+ 1.1	+ 14.1	+ 6.4	+ 7.0	+ 4.4	
	1931-1941	+ 24.4	+ 19.6	+ 22.9	+ 24.4	+ 22.1	+ 3.1	
Birma	1901-1911	+ 21.3	+ 23.3	+ 13.2	+ 23.8	+ 22.1	+ 14.7	
	1911-1921	+ 18.2	+ 18.2	+ 24.7	+ 14.2	+ 17.4	+ 15.4	
	1921-1931	+ 9.4	+ 3.2	+ 9.1	+ 11.0	+ 18.3	+ 8.6	
	1931-1941	+ 10.7	+ 11.5	+ 15.3	+ 6.8	+ 12.3	+ 11.4	
	1941-1951	+ 7.0	+ 21.8	+ 4.1	+ 0.1	+ 4.0	+ 20.4	
Central Provinces and Berar	1901-1911	+ 17.0	+ 23.3	+ 11.3	+ 13.0	+ 18.0	+ 45.8	
	1911-1921	+ 0.2	+ 2.1	+ 27.4	+ 5.1	+ 2.0	+ 0.2	
	1921-1931	+ 2.9	+ 10.8	+ 18.0	+ 0.2	+ 8.1	+ 6.2	
	1931-1941	+ 4.4	+ 3.6	+ 23.4	+ 1.0	+ 7.1	+ 9.4	
	1941-1951	+ 3.1	+ 7.4	+ 13.0	+ 1.1	+ 3.8	+ 13.1	
Coorg	1911-1921	+ 6.4	+ 1.4	+ 8.2	+ 11.2	+ 6.4	+ 6.2	
	1921-1931	+ 18.6	+ 23.3	+ 3.0	+ 16.1	+ 21.4	+ 22.9	
	1931-1941	+ 7.0	+ 4.3	+ 21.3	+ 3.3	+ 11.0	+ 6.3	
	1941-1951	+ 6.4	+ 3.9	+ 2.7	+ 11.4	+ 10.2	+ 14.7	
	1951-1961	+ 2.2	+ 6.4	+ 8.0	+ 3.5	+ 0.4	+ 4.4	
Madras	1901-1911	+ 17	+ 23	+ 2	+ 25	+ 1	+ 45	
	1911-1921	+ 10	+ 3	+ 35	+ 3	+ 22	+ 108	
	1921-1931	+ 7	+ 8	+ 6	+ 3	+ 11	+ 16	
	1931-1941	+ 3.8	+ 3.1	+ 1.4	+ 18.2	+ 9.7	+ 13.2	
	1941-1951	+ 10.1	+ 28.6	+ 0.4	+ 18.2	+ 7.0	+ 40.9	
Panjab and Delhi	1881-1901	+ 8.2	+ 5.1	+ 27.2	+ 0.2	+ 3.1	+ 4.4	
	1901-1911	+ 3.2	+ 0.3	+ 1.0	+ 1.0	+ 4.2	+ 18.2	
	1911-1921	+ 3.4	+ 10.4	+ 10.1	+ 0.1	+ 4.2	+ 18.2	
	1921-1931	+ 6.2	+ 9.9	+ 0.2	+ 6.8	+ 6.1	+ 9.4	
	1931-1941	+ 1.4	+ 3.2	+ 12.3	+ 1.4	+ 4.2	+ 4.2	
United Provinces	1901-1911	+ 0.6	+ 1.1	+ 4.1	+ 0.7	+ 1.4	+ 3.0	
	1911-1921	+ 3.1	+ 0.3	+ 2.7	+ 8.5	+ 9.1	+ 0.2	
	1921-1931	+ 10.4	+ 14.4	+ 0.8	+ 10.0	+ 9.1	+ 16.7	
	1931-1941	+ 79.2	+ 35.8	+ 7.1	+ 19.4	+ 14.7	+ 40.4	
	1941-1951	+ 4.1	+ 22.0	+ 23.4	+ 2.8	+ 4.4	+ 20.8	
Punjab State	1901-1911	+ 4.6	+ 6.1	+ 42.4	+ 7.1	+ 5.7	+ 20.0	
	1911-1921	+ 10.4	+ 32.9	+ 10.1	+ 9.2	+ 6.4	+ 20.0	
	1921-1931	+ 6.4	+ 3.7	+ 25.8	+ 4.8	+ 3.0	+ 19.1	
	1931-1941	+ 1.0	+ 1.0	+ 15.0	+ 6.7	+ 1.2	+ 12.4	
	1941-1951	+ 13.2	+ 11.4	+ 18.4	+ 11.4	+ 11.1	+ 9.1	
Cochin State	1901-1911	+ 12.1	+ 12.8	+ 7.0	+ 14.4	+ 12.7	+ 18.0	
	1911-1921	+ 6.8	+ 5.5	+ 11.4	+ 3.8	+ 11.4	+ 11.4	
	1921-1931	+ 79.2	+ 70.0	+ 2.7	+ 17.0	+ 39.0	+ 20.5	
	1931-1941	+ 3.4	+ 14.2	+ 18.7	+ 2.8	+ 3.4	+ 12.2	
	1941-1951	+ 20.0	+ 23.3	+ 9.1	+ 18.0	+ 18.0	+ 36.4	
Parade State	1911-1921	+ 6.8	+ 8.8	+ 6.9	+ 10.2	+ 6.4	+ 6.1	
	1921-1931	+ 15.0	+ 8.0	+ 43.1	+ 13.2	+ 14.1	+ 14.1	
	1931-1941	+ 6.8	+ 8.2	+ 1.4	+ 6.4	+ 6.4	+ 6.4	
	1941-1951	+ 8.0	+ 5.1	+ 7.7	+ 4.0	+ 1.2	+ 6.1	
	1951-1961	+ 18.1	+ 42.1	+ 22.2	+ 30.0	+ 23.4	+ 23.4	
Q. I. and Gwalder	1901-1911	+ 12.1	+ 9.0	+ 30.5	+ 0.7	+ 20.4	+ 21.3	
	1911-1921	+ 4.4	+ 4.4	+ 3.9	+ 13.7	+ 9.4	+ 18.2	
	1921-1931	+ 3.0	+ 6.0	+ 0.2	+ 3.8	+ 6.2	+ 7.2	
	1931-1941	+ 18.0	+ 27.8	+ 2.8	+ 11.3	+ 13.4	+ 27.3	
	1941-1951	+ 8.2	+ 34.7	+ 23.8	+ 6.0	+ 4.4	+ 10.0	
Kashmir State	1911-1921	+ 6.0	+ 1	+ 7.4	+ 14.4	+ 8.8	+ 1.2	
	1921-1931	+ 12.1	+ 1	+ 21.4	+ 14.2	+ 14.2	+ 0.4	
	1931-1941	+ 15.4	+ 21.3	+ 19.4	+ 12.4	+ 14.2	+ 19	
	1941-1951	+ 18.2	+ 19.1	+ 19.4	+ 12.4	+ 14.2	+ 19	
	1951-1961	+ 16.9	+ 18.1	+ 22.8	+ 18.2	+ 15.4	+ 18.1	
Mysore State	1901-1911	+ 15.4	+ 21.3	+ 19.4	+ 12.4	+ 14.2	+ 19	
	1911-1921	+ 18.2	+ 19.1	+ 19.4	+ 12.4	+ 14.2	+ 19	
	1921-1931	+ 16.9	+ 18.1	+ 22.8	+ 18.2	+ 15.4	+ 18.1	
	1931-1941	+ 15.4	+ 21.3	+ 19.4	+ 12.4	+ 14.2	+ 19	
	1941-1951	+ 18.2	+ 19.1	+ 19.4	+ 12.4	+ 14.2	+ 19	
Rajasthan (Agency)	1901-1911	+ 8.2	+ 34.7	+ 23.8	+ 6.0	+ 4.4	+ 10.0	
	1911-1921	+ 6.0	+ 1	+ 7.4	+ 14.4	+ 8.8	+ 1.2	
	1921-1931	+ 12.1	+ 9.0	+ 30.5	+ 0.7	+ 20.4	+ 21.3	
	1931-1941	+ 4.4	+ 4.4	+ 3.9	+ 13.7	+ 9.4	+ 18.2	
	1941-1951	+ 3.0	+ 6.0	+ 0.2	+ 3.8	+ 6.2	+ 7.2	
Tamil Nadu State	1901-1911	+ 18.0	+ 27.8	+ 2.8	+ 11.3	+ 13.4	+ 27.3	
	1911-1921	+ 8.2	+ 34.7	+ 23.8	+ 6.0	+ 4.4	+ 10.0	
	1921-1931	+ 6.0	+ 1	+ 7.4	+ 14.4	+ 8.8	+ 1.2	
	1931-1941	+ 12.1	+ 9.0	+ 30.5	+ 0.7	+ 20.4	+ 21.3	
	1941-1951	+ 4.4	+ 4.4	+ 3.9	+ 13.7	+ 9.4	+ 18.2	

NOTE.—Column 3 shows variation in population for all ages as returned and not in total population.

SUBSIDIARY TABLE V.

Reported death-rate per mille in certain Provinces by sex and age.

Age	AVERAGE OF DECADE.		AVERAGE OF PERIOD		AVERAGE OF PERIOD		AVERAGE OF DECADE.	
	1901 1910		1911 1917		1918 1920		1911 1920	
	Males.	Females	Males	Females	Males	Females.	Males	Females.
1	2	3	4	5	6	7	8	9
ASSAM								
0-5	79	72	112	101	133	125	120	108
5-10	15	13	13	11	24	21	17	14
10-15	13	12	11	10	21	21	14	13
15-20	17	22	14	17	26	30	17	21
20-40	19	22	16	20	32	36	21	25
40-60	32	23	32	20	53	44	38	33
60 and over	70	56	68	54	97	77	77	61
BENGAL								
0-5	157	133	121	111	135	128	125	116
5-10	10	15	15	13	20	17	17	14
10-15	14	12	11	10	16	15	12	11
15-20	19	21	14	17	23	25	17	19
20-40	21	22	17	20	27	29	20	22
40-60	35	31	33	30	42	36	35	32
60 and over	79	64	77	65	88	72	81	67
BIHAR AND ORISSA								
0-5	181	157	129	109	138	130	125	115
5-10	20	17	17	15	24	21	19	17
10-15	16	14	14	12	20	18	16	14
15-20	10	14	14	13	24	22	17	16
20-40	21	10	10	10	32	28	23	20
40-60	33	32	34	28	53	43	40	38
60 and over	93	77	80	70	113	91	94	77
BOMBAY								
0-1	320	285	200	187	230	217	209	196
1-5	54	52	56	53	73	70	61	59
5-10	15	16	14	16	25	28	17	19
10-15	13	16	10	14	19	26	13	17
15-20	18	21	12	16	25	34	16	21
20-30	20	21	14	17	30	44	21	25
30-40	23	23	17	18	40	45	24	26
40-50	32	26	24	20	44	39	30	26
50-60	47	39	40	33	62	53	47	39
60 and over	100	98	92	68	125	118	102	97
BURMA.								
0-5	181	131	234	202	196	176	223	194
5-10	14	12	11	10	15	15	13	12
10-15	10	9	8	7	11	12	9	9
15-20	10	12	12	10	18	18	14	13
20-40	16	15	14	14	22	23	16	17
40-60	26	22	23	20	33	29	26	23
60 and over	63	59	67	66	77	72	70	68
C P AND BERAR.								
0-1	170	144	271	238	332	299	239	250
1-5	14	12	63	69	82	80	76	65
5-10	8	8	15	14	31	29	20	18
10-15	12	13	10	10	26	29	15	16
15-20	12	13	12	13	37	40	19	21
20-30	15	14	13	13	41	43	21	22
30-40	15	14	15	15	40	47	25	24
40-50	23	22	23	17	54	43	32	25
50-60	28	22	37	31	70	57	47	39
60 and over	98	80	85	72	135	114	100	85
MADRAS								
0-1	190	165	197	178	201	188	193	181
1-5	31	29	33	30	40	38	35	32
5-10	9	9	10	9	14	14	11	11
10-15	7	7	7	7	11	11	8	8
15-20	10	13	9	11	20	22	11	14
20-30	12	12	10	11	20	22	13	15
30-40	14	12	13	12	23	21	16	15
40-50	20	16	18	14	26	21	20	16
50-60	31	26	20	24	38	32	31	26
60 and over	71	67	71	60	85	82	75	73
N W F PROVINCE.								
0-1	202	165	181	175	195	180	185	175
1-5	47	46	47	41	44	41	45	41
5-10	12	12	11	12	18	19	13	14
10-15	8	10	9	11	20	24	12	15
15-20	8	10	12	13	33	38	19	21
20-30	10	14	12	12	33	34	18	19
30-40	14	19	14	16	36	41	21	24
40-50	22	25	20	21	44	44	27	28
50-60	35	35	30	31	55	57	37	38
60 and over	68	70	61	63	77	77	60	68
PUNJAB								
0-1	306	310	298	297	212	210	210	208
1-5	60	71	59	62	65	66	61	63
5-10	19	23	13	15	20	23	15	17
10-15	17	25	10	15	18	23	13	18
15-20	19	24	11	16	25	33	15	20
20-30	21	24	11	14	26	33	16	20
30-40	24	29	14	18	30	37	19	23
40-50	33	36	20	20	36	38	25	26
50-60	46	50	29	30	51	54	35	37
60 and over	95	105	71	75	94	99	78	82
UNITED PROVINCES								
0-1	332	331	227	215	282	256	243	227
1-5	71	71	69	67	101	97	78	76
5-10	18	18	13	14	26	26	17	17
10-15	12	13	10	12	23	21	13	15
15-20	14	19	12	15	23	23	17	20
20-30	16	20	15	17	36	39	21	23
30-40	10	23	13	18	40	40	25	26
40-50	30	23	20	22	48	43	32	29
50-60	51	44	41	37	70	63	50	44
60 and over	67	74	70	66	114	97	87	80

CHAPTER VI

Sex

Introductory
remarks.

113 In the chapter on sex in the census report of 1911 my predecessor discussed fully the more important aspects of the sex ratio in India and the influences which determine the varying proportions in different tracts of the country. It would be superfluous to go over this ground again and I propose in this chapter to recapitulate as briefly as possible the conclusions which emerged from the analysis then made, to set out the conditions as regards the proportions of the sexes which the statistics of the present census exhibit and to add any further information of a general or statistical nature which is now available on the subject.

114. The fact that in the population of India there is an excess of males over females while in most of the countries of Western Europe the opposite is the case had attracted the attention of certain critics, who impugned the accuracy of the Indian statistics, inferring that there was a serious omission of women in the census. The argument was met by a close analysis of the statistical material. It was shown that the excess of women was more or less confined to certain countries of Western Europe where it was largely due to migration and that the case is otherwise in Eastern Europe and in other parts of the world from which the figures of India do not greatly differ. Again the allegation that there is in the census of India a serious omission of women was shown to be unsustainable. In the first place the extent of omission which would have to be assumed to bring the Indian proportions into line with those of Western Europe is beyond any figure that is consistent with the known general accuracy of the Indian census. Again on the one hand the lower proportions of females do not occur in the communities and regions in which they would be expected if they were due to failure to return women, e.g. among Muhammadans while on the other hand the sex ratio* is sometimes specially low in groups of people who are not in the least reticent in speaking about their women e.g. Sikhs and Jats and speaking generally there are extraordinary differences between the sex proportions in communities which do not differ in respect of their outlook on their women. Finally any tendency towards the omission of women would undoubtedly decrease at each successive census with the increasing accuracy of the enumeration while as a matter of fact there has been a steady fall in the proportion of women returned since 1901. So far as the statistics are concerned, therefore every indication is adverse to the theory of the omission of females in the enumeration.

There are on the other hand well known features in the life-history of the sexes in India which are fully sufficient to account for the preponderance of males in the population. Sir Edward Gart wrote —

In Europe boys and girls are equally well cared for. Consequently as boys are constitutionally more delicate than girls, by the time adolescence is reached a higher death rate has already obliterated the excess of males and produced a numerical equality between the two sexes. Later in life, the mortality amongst males remains relatively high, owing to the risks to which they are exposed in their daily avocations, hard work, exposure in all weathers and accidents of various kinds combine to make their mean duration of life less than that of women, who are for the most part engaged in domestic duties or occupations of a lighter nature. Hence the proportion of females steadily rises. In India the conditions are altogether different. Sons are earnestly longed for while daughters are not wanted. This feeling exists everywhere, but it varies greatly in intensity. It is strongest amongst communities, such as the higher Rajput clans, where large sums have to be paid to obtain a husband of suitable status and the cost of the marriage ceremony is excessive, and those like the Pathans, who despise women and hold in derision the fate of daughters. Sometimes the prejudice against daughters is so strong that abortion is resorted to when the midwife predicts the birth of a girl. Formerly female infants were frequently killed as soon as they were born, and even now they are very commonly neglected to a greater or less extent. The advantage which nature gives to girls is thus neutralized by the treatment accorded to them by their parents. To make matters worse they are given in marriage at a very early age and cohabitation begins long before they are physically fit for it. To the evils of early child-bearing must be added unskillful

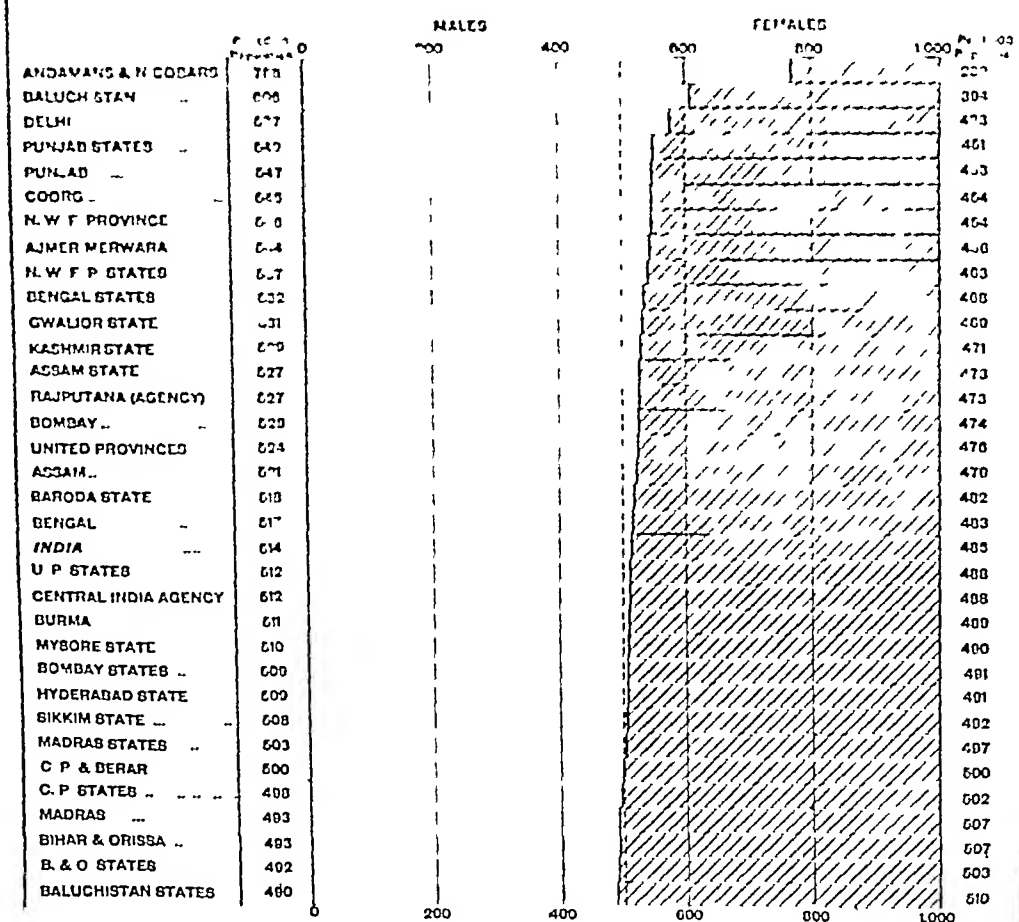
* I use the term sex ratio here and elsewhere to indicate the number of females per hundred or per thousand males.

midwifery, and the combined result is an excessive mortality amongst young mothers. In India almost every woman has to face these dangers. Lastly, amongst the lower classes, who form the bulk of the population the women often have to work as hard as and sometimes harder than the men, and they are thus less favourably situated in respect of their occupations than their sisters in Europe'.

115 There was nothing in the circumstances of the census of 1921 likely to occasion any special difficulty in the enumeration of women. The further fall in the proportion of women through the result of definite factors operating in the decade is indeed an additional argument against the charge of inaccuracy. There are among some of the aboriginal tribes of Madras and the Chota Nagpur division of the Central Provinces and in Jummā anomalies in the sex proportions which the Superintendents think may be ascribed to defects of enumeration and the difficulties of enumeration in the North-West Frontier areas combined with the low estimation in which women are held there may account for a part of the remarkable deficiency of women in the census figures for those regions. But the population concerned is small and the cases form an easily intelligible exception. It may be accepted that the return of sex is on the whole accurate and that the proportions given represent the existing facts within the margin of error applicable to the enumeration in general. With this assumption we may proceed to examine the statistics.

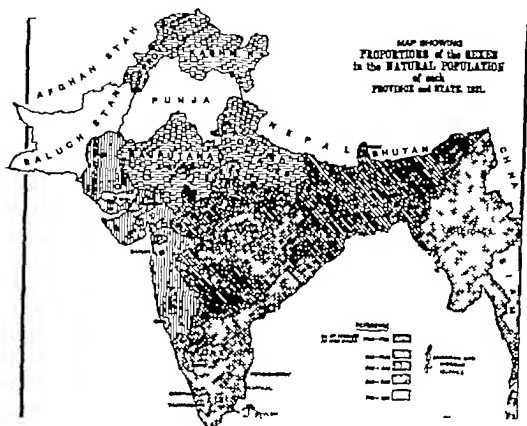
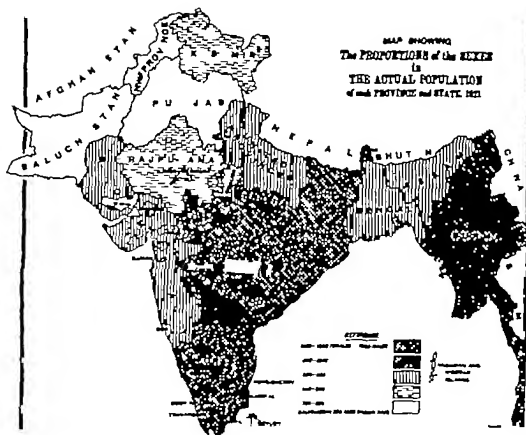
116 The distinction of sex is maintained in all the census tables the most important being for the purposes of this chapter Table VII in which the statistics of sex are combined with those for age, religion and civil condition and Table XIV, in which they are combined with caste, tribe or race. The sex ratios for the whole of India and for the principal provinces and states at the last five censuses are given in Subsidiary Table I for the actual and natural population†. The figures of the actual population are shown in the diagram below and those of both the actual and natural population in the maps on the next page.

DIAGRAM SHOWING THE SEX PROPORTIONS PER 1000 OF THE POPULATION
IN THE PROVINCES, STATES & AGENCIES OF INDIA, 1921.



* India Report 1911 paragraph 275

†The figures for the natural population are not absolutely accurate, as it has not been possible to make allowance for emigrants to Nepal and certain Colonies, etc., from which returns have not been received, or for which details by provinces are not available.



Certain points of interest immediately stand out on an examination of the figures —

- (i) The difference between the ratio in the actual and the natural population due to the influence upon the figures of migration varies

both in degree and direction and is considerable in some of the larger provinces (e.g., Assam, Bengal, Bihar and Orissa, Burma, Madras and the United Provinces).

(ii) The sex ratio both in the actual and the natural population is high in the south of India and low in the north. It is higher in the east than in the west of the country and it is lowest in the north-western areas.

(iii) There has been a substantial decline in the ratio of females to males in the natural population since 1891. The fall was heavy in the decade 1901 to 1911, especially in the Punjab, the United Provinces and Baroda, and it has, with few exceptions, in which the Punjab is conspicuous, continued in an even greater ratio in the recent decade.

117. The numbers of each sex being determined like those of the total population by birth, death and migration it will be necessary to examine each of these factors in turn, dealing first with migration.

Province	Actual population	Natural population
Assam	916	911
Bengal	922	911
Bihar and Orissa	1021	916
Bombay	919	931
Burma	917	1027
C. P. and Berar	1002	1006
Madras	1018	1001
Punjab	818	811
United Provinces	911	896

Bengal, Burma and Bombay the proportion of females is higher in the natural than in the enumerated population, while in Bihar and Orissa, Madras, Rajputana, the Punjab and the United Provinces the reverse is the case. The former group contains the regions which receive immigrants and the latter those which send out emigrants. The same phenomenon is seen in the case of smaller units, such as the Mysore State, where industrial and agricultural enterprise has attracted labour, and we have already in chapter III noticed the low ratio of females in the industrial populations of the Presidency and Northern divisions of Bengal. In Burma the natural population shows in the last three censuses an excess of females, the ratio amounting to about 1,027 per 1,000 males. In the actual population, however, which contains an increasing number of foreign immigrants, the females are in defect and the sex ratio has dropped from 962 in 1901 to 955 in 1921. *The ratio of females is always comparatively low in a population that contains a foreign element.* An exception to this rule will however be found in the tea gardens of Assam where women are in demand as labourers. The tea garden population has a female ratio of 956, which is rather higher than the ratio (951) in the natural population of the Province. In the North-West Frontier Province and Baluchistan the proportions in the actual population are largely affected by nomadism and migration. In the latter Province the sex proportion of 735 for the whole population is raised to 824 if the indigenous population only is taken, but even among the latter nomadism influences the figures.

118. The sex proportions in the natural population depend on the differential birth and death-rates, and as, in comparing the numbers, errors of omission in the records, in so far as they are equal for both sexes, tend to cancel one another, the proportions based on the recorded figures can be used with some confidence.

The greater estimation in which male life is held among Indians generally would suggest the probability that omissions in reporting vital occurrences would be more numerous in the case of females than among males, the difference being more conspicuous in the case of births. It is generally believed that among certain communities of the Punjab and possibly of the United Provinces the reporting of female births is avoided, whether the reason be merely the unimportance of the event or whether it has a more sinister character it is difficult to say. During severe epidemics again, when the registration machinery is generally thrown out of gear, there is reason to suppose that a substantially large proportion of female deaths remain unrecorded, and the comparison between the census and deduced population made in paragraph 14 above showed that this was the case in the influenza epidemic of 1918. Otherwise, and throughout the larger parts of the rural areas of India, the omissions are probably not seriously unequal and the figures quoted for Indian

areas serve at least to indicate

Country	Females per 1,000 males
England and Wales	1,004
France	1,074
Japan	979
United States	913
Australia	925
Canada	994

the average or standard of the ratios which obtain in different regions, and the tendency and limit of the variations round the averages. The sex proportions at birth vary widely in different countries at different times. The marginal table gives the statistics for some countries of the world. One of the latest contributions to the subject of masculinity at birth is a paper by Mr S. de Jastrzebski,* who has collated and analysed a good deal of the recent material on the subject. Among other conclusions he considers that there is evidence to

show that masculinity at birth is affected by race, that it is greater in rural than in urban populations, that it is probably slightly greater in first than in subsequent births and that so far as present evidence goes war raises the ratio of masculinity. The proportion of females born per 1,000 males averages

Average number of female births per 1,000 male births in three decades.

Province.	BIRTHS BOARDS RETURNED.		
	1901.	1911.	1921.
Bengal	906	941	923
Bihar and Orissa	913	966	900
Bombay	825	835	825
Burma	931	936	945
Central Provinces	941	954	956
Madras	959	936	966
N. W. F. Province	915	918	905
Punjab	909	909	900
United Provinces	918	924	919

933 in India for the decade and differs in different tracts of the country. The figures for the main provinces for three censuses are given in the margin. It will be noticed in the first place that the variations in the birth averages between the Provinces substantially accord with the regional distribution of the sex ratios which the census figures give. Thus the deficiency of females at birth, which so far as is known, is a universal phenomenon in every population of the world for which statistics are available, is least in Madras, the Central Provinces Bihar and Orissa and Burma and is greatest in the United Provinces the

Punjab and North West Frontier Province while Bengal and Bombay stand intermediate. A downward trend of the birth averages over the twenty years may perhaps be distinguished in Bengal Madras and the Punjab but though there are considerable variations in individual years, it is doubtful if the variations in the averages are large enough to have any significance. There has been however an undoubted rise in the ratio of masculinity in most of the large provinces during the last half of the decade which is in accordance with the

Number of females born per 1,000 males born.

Province	Average 1911-1914.	Average 1916-1920.
India	906	939
Bengal	913	931
Bombay	827	822
C. P. and Berar	936	954
Madras	957	955
N. W. F. Province	908	902
Punjab and Delhi	913	900
United Provinces	923	914

experience of a large number of countries both those which were affected by the war and those which were not. This rise in masculinity in India may indeed be a mere chance variation but it has formed one factor in the decrease in the sex ratio of females which the census figures disclose. Variations in the sex ratios in urban and rural areas suggest no definite correlations, and in any case the registration of births in urban areas is too defective to allow the statistics to form a valid basis of inference.

The statistics of birth do not distinguish between religions, races or castes. We can only say that they indicate that in the regions in which the Mongolian and Dravidian race element is strongest that is in Burma and the south and central tracts of India there is a higher proportion of females born than in those areas

Region.	Sex ratio at birth (percentage).	Sex ratio at age 5-1 (percentage).
B. & O.— Orissa	919	951
Chota Nagpur	962	1,024
C. P. and Berar— Sehore	949	954
Chhattisgarh	971	1,021

in north and north west India in which the Aryan or Semitic strain prevails. This distinction appears clearly from a comparison between the sex birth rates in tracts where the racial constitution is more clearly defined and receives corroboration from a comparison with the census figures of children under one year old in the same areas. The figures in the margin indicate the contrast in the present decade the aboriginal strain predominating both

in the Chota Nagpur and the Chhattisgarh areas. Similar conclusions regarding

DIAGRAM showing the PROPORTIONS of FEMALE BIRTHS PER 1000 MALE BIRTHS during the DECADE 1911-20 in INDIA and PRINCIPAL PROVINCES

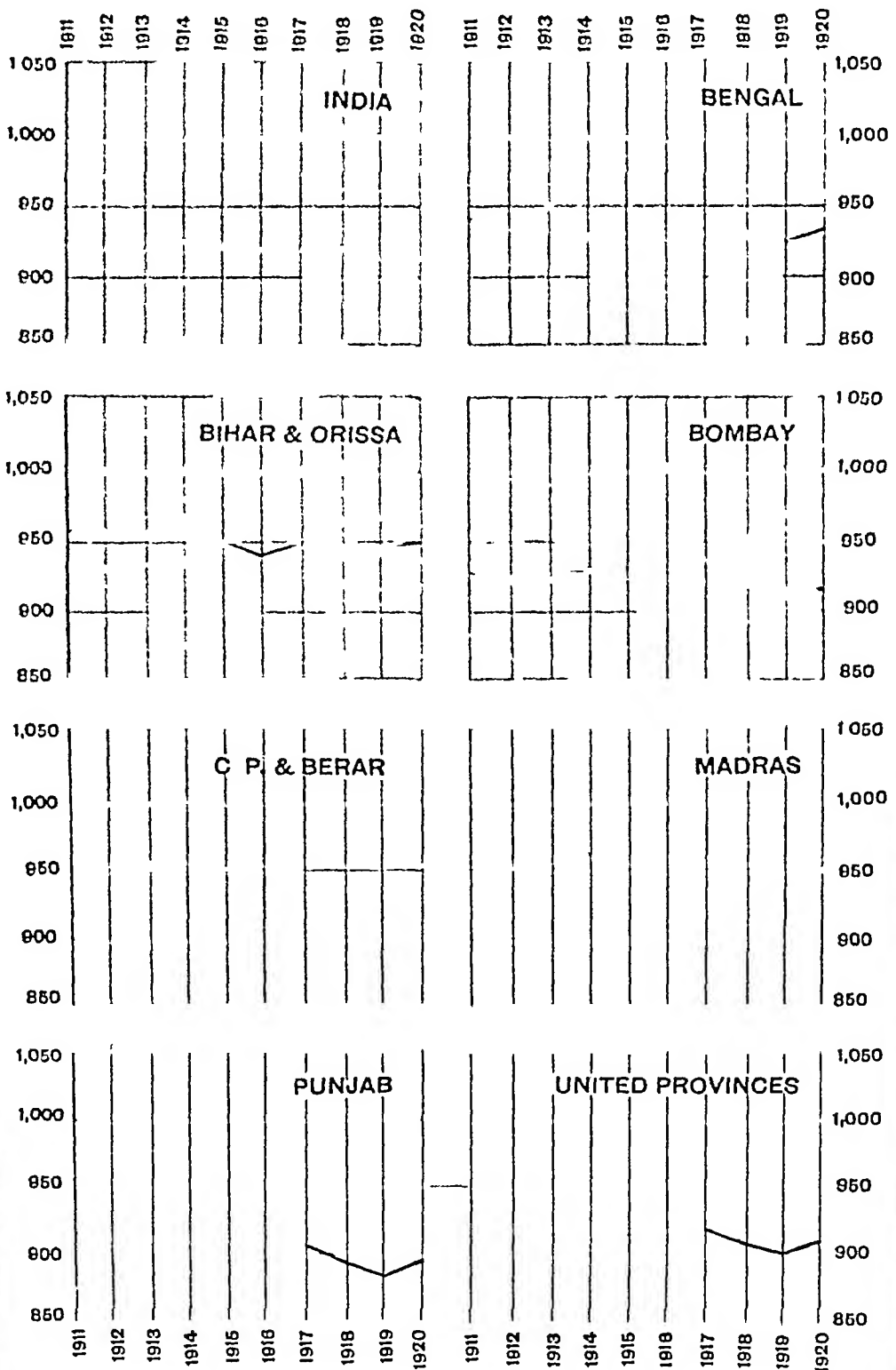
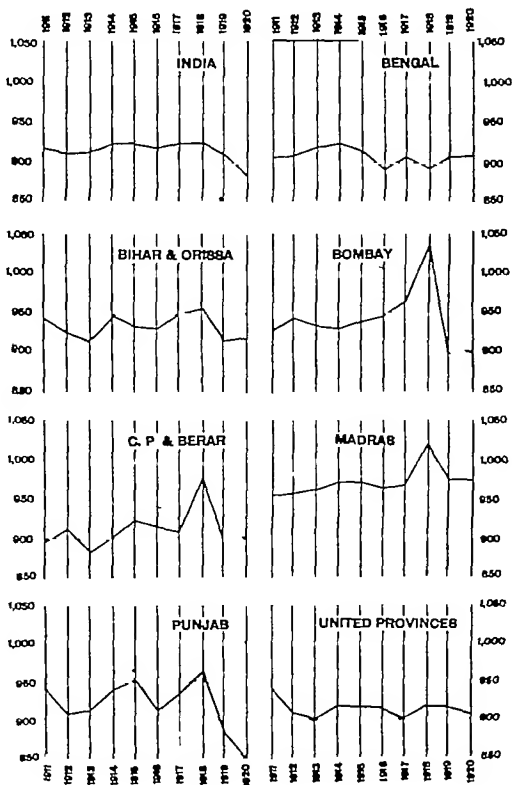
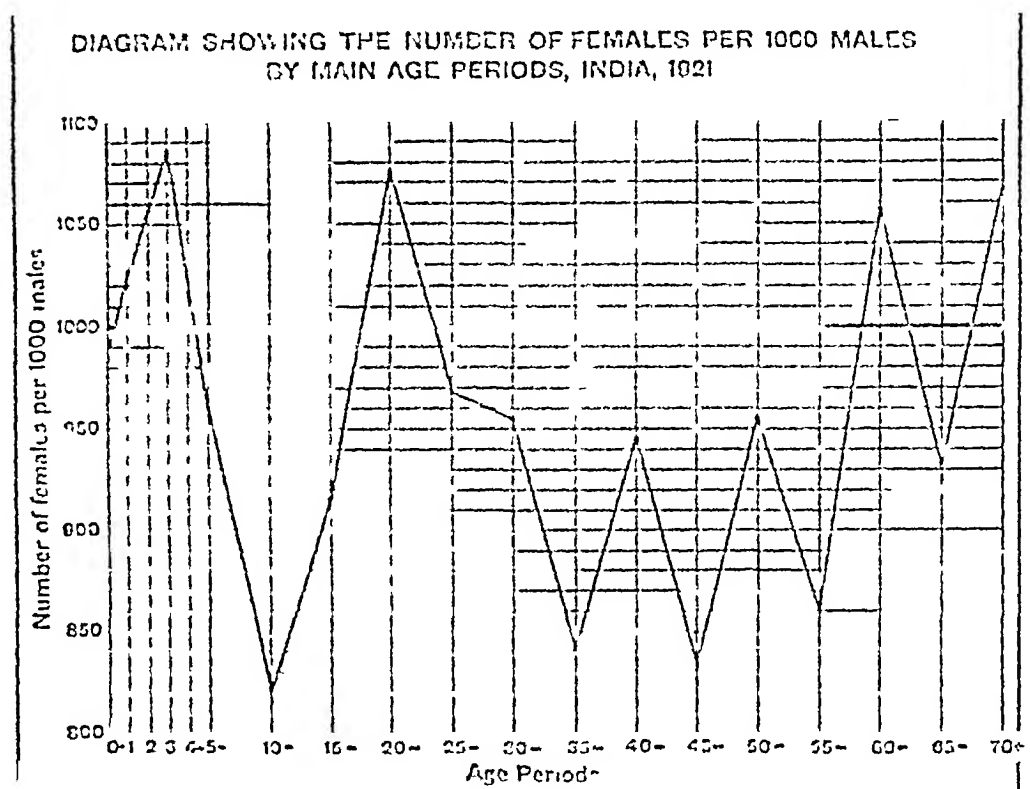


DIAGRAM showing the PROPORTIONS of FEMALE DEATHS PER 1000 MALE DEATHS during the DECADE 1911-20 in INDIA and PRINCIPAL PROVINCES



the racial influence emerged from the special enquiries into the sex composition of families, the results of which are reviewed in Appendix VII. Such indications as these enquiries afforded were in favour of a larger female element in families belonging to the lower strata of the population. These investigations also offered distinct evidence in favour of a higher ratio of masculinity in the first-born child.

119 The diagram below shows the number of females per 1,000 males at different age periods in India as a whole. The curve in the diagram must be interpreted in terms of a smoothed line, which would soften the sharp curves—especially between 10 and 25—due to the fact explained above that the common errors in age declaration are different in the two sexes at different age periods.



120 A marked feature of the statistics of the last twenty years has been the

Province	FEMALE DEATHS PER 1000 MALE DEATHS AVERAGE FOR DECADE ENDING		
	1901	1911	1921
Bengal	874	895	900
Bihar and Orissa	870	910	936
Bombay	901	936	957
Punjab	817	849	901
C. P. and Berar	853	917	923
Madras	951	961	970
Punjab	918	983	928
United Provinces	881	957	918

increase in the proportion of female deaths since 1901. The statistics for some of the main provinces are given in the margin and the variations in the last decade are illustrated in the diagrams opposite. Whatever the intrinsic value of these ratios may be they conform on the whole to the actual experience of the period. The dominant factor in the death-rate of the decennium ending in 1901 was the direct and indirect influence of famine and scarcity, and it has been conclusively shown in previous reports that famine mortality fell

The Sex Ratio
at Death

more heavily on men than on women, the latter sex apparently being constitutionally more able to resist the hardships which economic stringency brings. With the perfection of famine organization the mortality attributable directly and indirectly to lack of food has ceased to be a considerable factor and the sex selection in favour of women from this particular cause has therefore ceased to operate. On the other hand plague is a disease which is specially fatal to women, while epidemic malarial and relapsing fever are also generally believed to cause a greater mortality among women, the reason in all these cases probably being the fact that women, whose occupations keep them in the house, are more exposed to the attacks of the germ-bearing insects. There is little doubt that the marked rise in the proportionate death-rate of women in the decade 1901 to 1911 was due to these influences, which continued during the recent decade, culminating in the influenza

epidemic, which seems to have been specially fatal to women and more particularly to young married women. The death rates of the earlier and later periods of the decade are compared in the diagrams opposite which bring out the heavy incidence of mortality in females in 1918 in spite of the serious omission of female deaths from the records which we have noticed in para. 118 above.

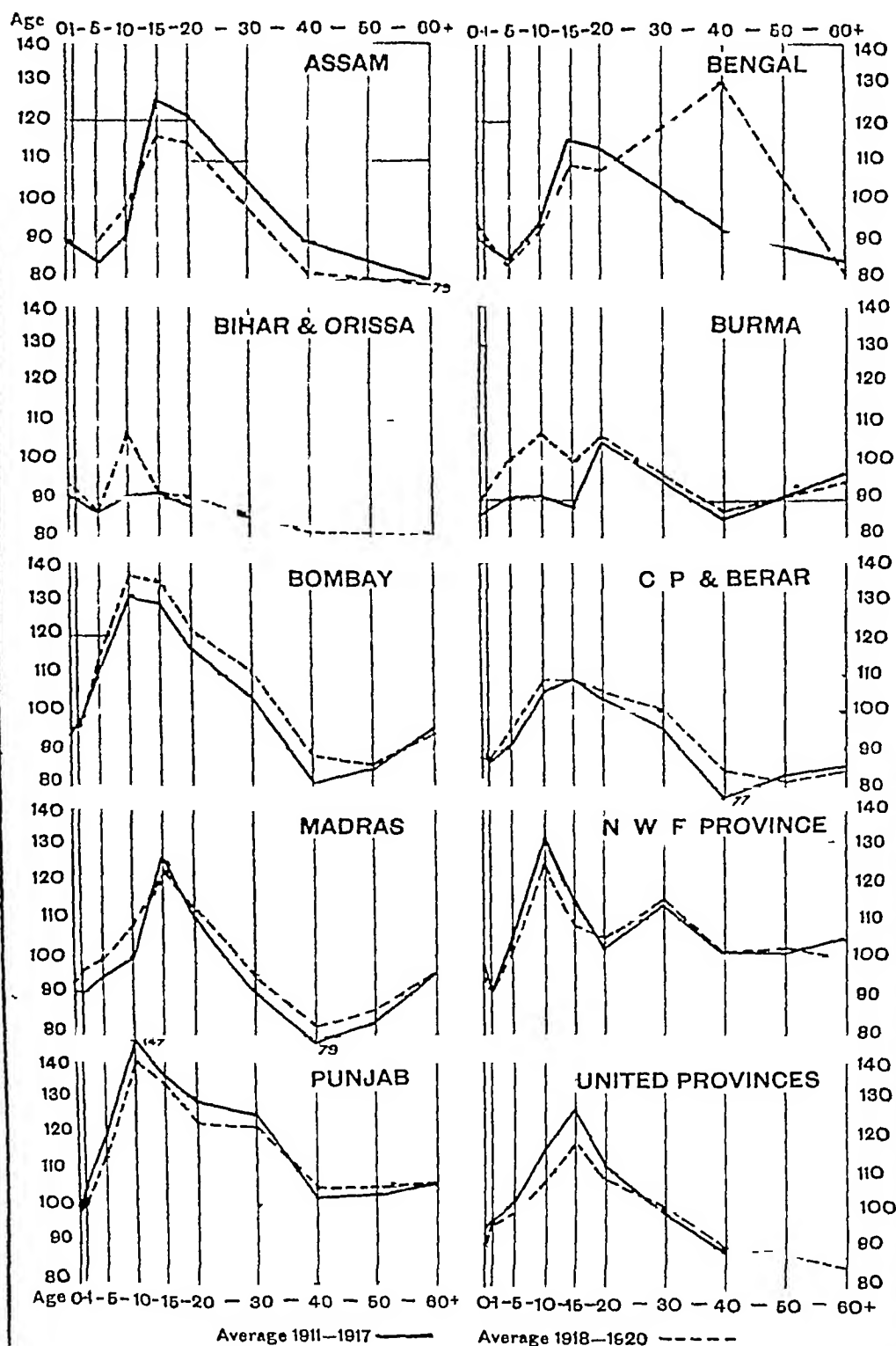
Sex proportions in different regions.

121 We may now examine in more detail the sex proportions and their tendencies in the different Provinces and States. In respect of their sex ratio the Provinces retain much the same order at the present census as in 1911. The range is considerable, varying from a maximum in the actual population of 1 029 in Bihar and Orissa to a minimum of 828 in the Punjab. Putting Burma aside the general tendency is towards a greater and greater deficiency as one proceeds north and east. In Madras, where there has been a steady fall since 1901 the natural population contains an excess of 5 females to every 1 000 males, but the regional figures of the natural population are obscured by the impossibility of referring to their birth-districts the large number (over 800 000) of emigrants to places outside India. Taking the figures of the actual population the proportion of females is high in the north, south and western coastal divisions and low in the Deccan division. The proportion of female births to male births has varied widely during the decade round an average of 958 which is slightly lower than the average of the preceding decade (958). The ratio was specially low at the end of the decennium and to this fact, together with the great female mortality due to influenza especially in the Agency and Deccan tracts, is ascribed the fall in the proportion of females. The Hindus have the highest proportion of females among the religious communities but unlike the aborigines of the Central Provinces and Bihar and Orissa, the tribes in Madras have fewer women than men. Nor is it easy to find in the figures of the present census any uniform principle racial or otherwise running through the very wide deviations in the sex proportions of different castes in South India.

In Bengal the proportion of females has been steadily declining since 1881. Migration is an important factor in the figures of the actual population especially in the industrial areas in the Presidency division where the sex ratio is as low as 859. In the natural population females are in least deficiency in the Western Bengal districts (984) and the general tendency is towards greater and greater deficit as one goes north and east the ratio in Eastern Bengal being 952. The Hindus who have a smaller sex ratio than the Muhammadans and Tribes contain a large foreign element which is chiefly masculine, but the Superintendent estimates the deficiency of females per 1 000 males among Hindus born in Bengal to be about 15 per mille greater than among Muhammadans born in the Province. The proportions in the castes have been affected by migration, but the Bhuiyas, Maghs, Bhumijs and Baurias have high sex ratios while women are comparatively few among the Brahmans, Kayasthas and Rajputs. The general conclusion to be drawn from the caste figures is that the sex proportion is highest in the aboriginal races and falls as the caste is further and further removed from relationship with the presumably indigenous races of Bengal. The statistics show that the sex ratio at birth, after varying round an average of 989 per 1 000 males for twenty years fell in 1914 to 930 and continued at this average for the next five years. On the other hand there seems to have been a strong tendency from about 1891 till the beginning of the war for the proportion of female deaths in Bengal to rise though the ratio fell in 1914. The proportion of female deaths to male deaths is in defect at every age-period except the groups 15 to 20 and 20 to 30 when the proportion rises on an average of 1,204 and 1,214 respectively. This average, which is slightly higher than that of the previous decade probably owing to influenza mortality is mainly the result of the custom of premature cohabitation which is prevalent in Bengal and causes a high proportion of deaths in child birth and an even greater mortality due to the after effects of child birth on the health of the mother.

In the United Provinces the sex ratio has dropped from 996 in the natural population in 1901 to 902 in 1911 and 896 in 1921. There can be no question of greater inaccuracy of enumeration and Mr Edye ascribes the failure on the part of nature to achieve a balance of the sexes solely to the customs of early marriage, premature child-birth and insanitary rural life. He thinks that the fall in the proportion of females during the last decade is largely due to the increase of masculinity at birth which began in the year following the war and has been progressively more marked during the second half of the decade. The proportions at ages however suggest that as in other regions affected by the

DIAGRAM showing in the MAIN PROVINCES of INDIA the PERCENTAGE of the FEMALE DEATH RATE (PER 1000 FEMALES) to the MALE DEATH RATE (PER 1000 MALES) at DIFFERENT AGE PERIODS



DIAGRAMS SHOWING THE NUMBER OF FEMALES PER 1000 MALES IN CERTAIN PROVINCES & STATES AT SIX CENSUSES.

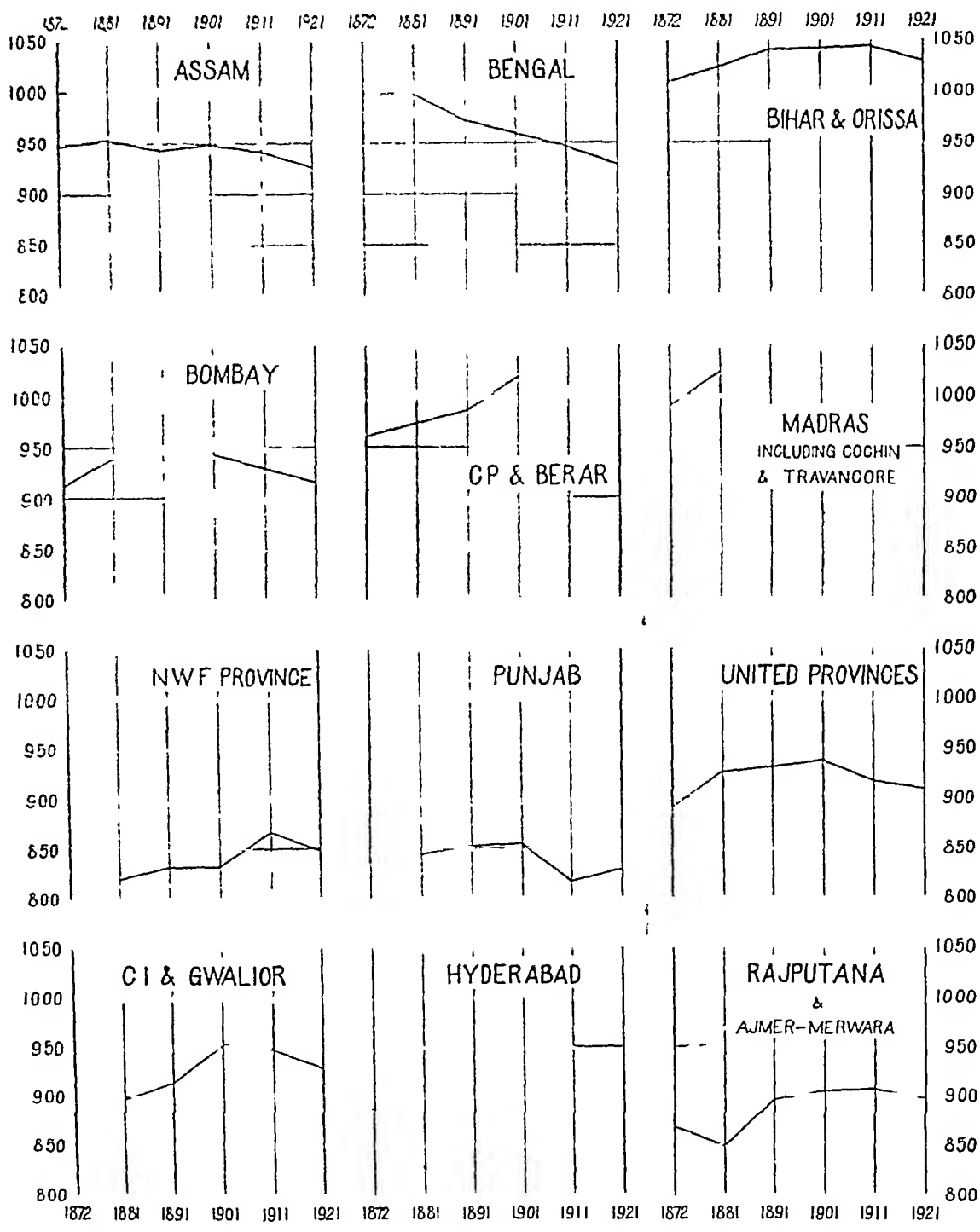


Table showing the number of females per 1,000 males in certain provinces and states at six Censuses

NUMBER OF FEMALES PER 1000 MALES.											
Year	Assam	Bengal	Bihar and Orissa	Bombay	C. P and Berar	Madras including Cochin and Travancore.	N.W.F. Province	Punjab	United Provinces.	C. I and Gwalior	Hyderabad.
1872	945	995	1009	912	900	992			880		
1881	943	994	1021	938	973	1020	810	844	925	897	958
1891	942	973	1040	938	985	1020	833	851	930	913	964
1901	949	960	1042	945	1019	1025	833	854	937	953	963
1911	940	945	1043	933	1008	1023	860	817	915	910	968
1921	920	932	1020	918	1002	1023	848	828	900	920	966

NOTE.—The proportions are inclusive of the States attached to the Provinces and have been calculated on the population dealt with in Imperial Table II

influenza epidemic, the greatest deficiency of females at this census occurs in the adult age-periods, though, possibly owing to defective registration, the differential death-rate (922) in 1918 is not conspicuously high. The average death-rate in the decade of females per 1,000 males (918) in this province is lower than in the previous decade (957), when plague undoubtedly selected its victims more frequently from among women.

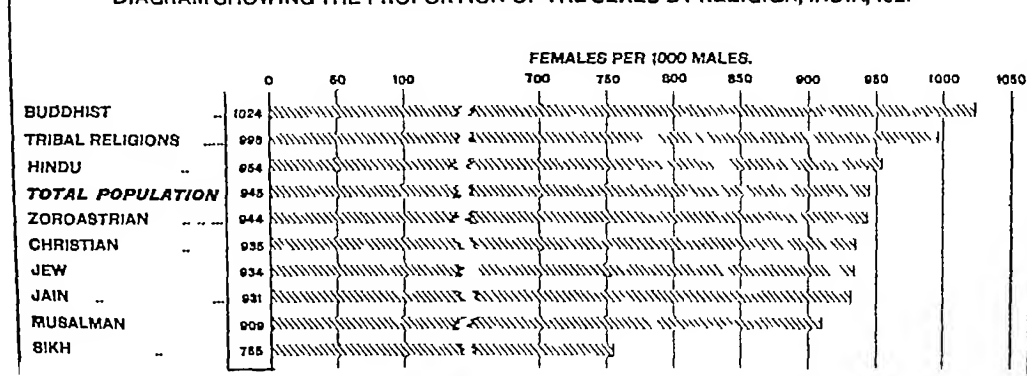
Outside the city of Bombay, where the industrial and commercial immigration accounts for a sex ratio of 525, the lowest proportion of females in the Presidency is found in Sind, which like the neighbouring tracts of North-West India has a permanent deficiency of women. Mr Sedgwick points out that, whether omission of females does or does not take place in the census and in registration operations, there is no question that this deficiency of women is in actual life a well known phenomenon, leading to a regular trafficking in brides from outside the area. We are forced to the conclusion either that there is actually a phenomenal excess of males at birth, such as the registration statistics actually show, or that female children are destroyed and their births not reported. From an analysis of the statistics of castes in the Presidency Mr Sedgwick comes to the opinion that there is clear evidence that sex proportion at birth is connected with race though climate and environment act as modifying influences. The fall in the sex ratio during the decade is undoubtedly due to the selection of females by influenza and plague and is specially noticeable in the Deccan and Karnatak districts.

In the Punjab the extraordinarily low ratio of females recorded may be due in part to defect in enumeration and registration, owing to the disregard in which women are held. But apart from such omissions the deficiency of females in certain tracts is well known and there is no reason to impugn the statistics. There is a fairly high proportion of females in the Himalayan tracts, while the lowest number of recorded females per 1,000 males occurs in two large areas stretching across the Punjab and including the colony areas and the tracts in which the Sikhs predominate and where female infanticide is known to have prevailed.* Mr Jacob can find no evidence in support of the theory that sex proportions have an hereditary or racial basis, the variations noticeable between different social groups and within single groups at different times being difficult to reconcile with such an hypothesis. The sex ratio at birth has averaged about the same over the last three decades (906 to 909 per 1,000). The proportion of women fell from 854 to 817 in the decade ending in 1911 owing to the selective mortality from plague. The plague factor has been much less important during the last decade, but though there is some rise in the sex ratio the proportion (826) has not risen to the level of 1901.

122 The diagram below and the marginal statement show the sex ratio in the

Sex by religion and race

DIAGRAM SHOWING THE PROPORTION OF THE SEXES BY RELIGION, INDIA, 1921



Religion	Females per 1000 males.
Hindu	954
Muhammadian	909
Tribal	999
Christian	935
Jain	931
Sikh	755

main religions for the whole of India. The figures are however of little value as they stand, as they are largely affected by regional and other considerations. The bulk of the Muhammadans are found in the areas in which the general sex ratio is lowest, viz, in the North-West Frontier Province, Baluchistan and Sind and in the Punjab and Bengal. In the last two provinces, where the Muhammadan and Hindu communities are

*A note on female infanticide and its influence on the sex proportions will be found in Appendix VI to this report.

more nearly balanced the Muhammadans have the higher sex ratio and in Sind also

Provinces.	Hindus.	Muham. males.
Bengal	916	948
Punjab	836	843

this was the case in 1911 though the heavy incidence of influenza mortality on the rural Muhammadan community has reversed the figures at the present census. In Gujarat where the Muhammadan community is fairly large the Muhammadans have 912 and the Hindus 918 females per 1 000 males.

The influence of the regional factor in the other direction is clearly seen in the high proportion of the women among the Mappillas (1 022) Labbais (1 180) and Sheikhhs (1 001) of Madras. The high female ratio of the Tribal peoples is with some exceptions fairly consistent, varying from 1 037 in the Central Provinces to 969 in Bombay the indigenous tribal races of Burma having a ratio of 1 020. The figure for the Christians as a whole is substantially affected by the numbers of the Europeans among whom males largely predominate the sex ratio of the Indian Christians of the Madras Presidency who are largely drawn from the lower strata of the population, is 1 020. The Jains in Rajputana, which is their home, have the high proportion of 1 073 females per 1 000 males which is considerably above that of any other community in that Agency. The Sikhs in the Punjab on the other hand, are conspicuous in having a sex ratio (764) well below even the extremely low figures of the other communities of the Punjab though the proportion of their females has risen somewhat since 1911 (740).

Summary of con-
clusions.

123. We may sum up the results of the previous discussion —

- (1) There may be some local tendency to omit females but there are no grounds to assume any general omission seriously affecting the figures
- (2) the statistics of this census conform with the regional distribution of the sex ratios shown in previous censuses. The higher sex ratios are found in the south and east and the lower in the north and west. The deficiency of females appears to increase as we proceed north and west
- (3) the proportions in the actual population are strongly affected by migration, the ratio of females always being comparatively small in a population containing a foreign element especially in industrial areas
- (4) the sex ratio has fallen in the last twenty years throughout India. The statistics of birth suggest that the proportion of females born to males born has if anything declined during this period and in any case there has been a marked decline in the last five years of the last decade in most provinces. The decline in the proportion of women however is chiefly due to (a) the absence of famine mortality which selects adversely to males and (b) the heavy mortality from plague and influenza which has selected adversely to females
- (5) the figures of the present census support the conclusions that the Dravidian castes have a high proportion of children.

SUBSIDIARY TABLE I.

Number of females per 1,000 males by Provinces, States and Agencies.

Province, State or Agency	NUMBER OF FEMALES TO 1,000 MALES									
	1921		1911		1901		1801		1831	
	Actual population	Natural population	Actual population	Natural population	Actual population	Natural population	Actual population	Natural population	Actual population	Natural population
1	2	3	4	5	6	7	8	9	10	11
Bia	945	944	954	953	963	963	958	958	954	956
Mer Merwana	837	850	884	818	900	870	881	893	851	773
Andamans and Nicobars	288	812								
Sam	926	951	940	963	919	973	942	966	953	965
uchistan	731	812	790	833						
ngal	932	954	945	970	960	952	973	995	994	1 013
har and Orissa	1 020	999	1 043	1 014	1 047	1 027	1 040	1 032	1 024	1 018
ombay	919	931	933	942	945	950	938	946	938	947
urma	955	1 026	950	1 028	962	1 027	962	1 017	877	980
entral Provinces and Berar	1 002	1 006	1 008	1 019	1 019	1 026	985	*	978	*
org	831	900	799	902	891	903	894	964	775	939
adras	1 028	1 004	1 032	1 011	1 029	1 029	1 023	1 025	1 021	1 019
orth West Frontier Province	881	865	858	887	816	886	848	892	819	879
elhi	738	788								
unjab	825	810	817	811	854	846	850	844	844	844
ulted Provinces	900	896	915	902	937	926	930	917	925	914
aroda State	932	922	925	927	936	970	928	929	917	890
entral India (Agency)	954	951								
allor State	883	901	949	955	948	954	912	921	897	903
ochin State	1 027	1 009	1 007	1 001	1 004	996	998	992	989	*
ydernbad State	968	969	968	974	994	970	984	971	968	974
ashmir State	890	883	887	881	884	887	880	887		
ysore State	962	972	979	990	989	994	991	1 000	1 007	1 008
ajputana (Agency)	899	885	900	898	905	901	891	883	852	843
kkim State	970	1,123	951	1 033	916	956	935			
ranvatore State	971	907	981	979	981	986	982	*	1 006	*

* Not available

NOTE.—The proportions for Provinces include the States attached to them except in the case of the North West Frontier Province, where they are for British territory only, and Madras where they exclude those for Cochin and Travancore.
The proportion for India in column 2 has been calculated on the population dealt with in Imperial Table VII. In calculating the natural population for India as a whole, the emigrants from India to the Straits Settlements Ceylon and other places for which returns are available have been taken into account.

SUBSIDIARY TABLE II

Number of females per 1,000 males at different age-periods by main religions at each of the last three censuses, India.

AGE.	All Religions			Hindu			Muslim			Tribal		
	1921	1911	1901	1921	1911	1901	1921	1911	1901	1921	1911	1901
1	2	3	4	5	6	7	8	9	10	11	12	13
0—1	991	1 001	998	993	1 004	999	983	991	987	1 009	1 020	1 035
1—2	1 077	1 041	1 035	1 030	1 040	1 039	1 021	1 029	1 027	1 055	1 067	1 081
2—3	1 053	1 050	1 042	1 066	1 053	1 015	1 045	1 046	1 030	1 098	1 080	1 053
3—4	1 085	1 085	1 059	1 089	1 074	1 067	1 046	1 051	1 046	1 101	1 098	1 115
4—5	1 017	1 001	1 010	1 010	1 092	1 015	1 007	993	991	1 039	1 035	1 060
Total 0—5	1 035	1,030	1 028	1 041	1 034	1 033	1 023	1 020	1 016	1 067	1 060	1 074
5—10	960	954	955	967	950	958	936	933	938	978	989	994
10—15	921	917	924	928	923	926	773	773	704	879	880	884
15—20	918	930	929	890	911	906	957	962	970	1 074	1 074	1 016
20—25	1 078	1 079	1 092	1 074	1 079	1 025	1 089	1 089	1 115	1,237	1,277	1,209
25—30	908	963	950	971	970	951	948	952	974	1 077	1 078	1 050
Total 0—30	956	960	960	957	960	958	943	947	956	1 021	1 036	1,025
30—40	905	910	931	922	933	947	842	854	878	967	937	974
40—50	902	912	937	922	929	952	836	854	856	873	879	939
50—60	926	950	974	947	973	991	918	907	917	923	965	1 019
60 and over	1 040	1 062	1 149	1 101	1 151	1,207	871	921	991	1 106	1 173	1,233
Total 30 and over	977	944	969	951	967	989	946	955	972	919	952	998
TOTAL ALL AGES	946	954	963	954	963	969	909	919	937	996	1 003	1,016

SUBSIDIARY TABLE III.

Number of female births per 1,000 male births in certain Provinces.

Year.	Assam.	Bengal.	Tiber and Orissa.	Bombay.	Burma.	Central Provinces and Berar.	Madras.	North-West Frontier Province.	Punjab.	United Provinces.
1	2	3	4	5	6	7	8	9	10	11
1811	928	941	988	938	945	954	954	916	954	911
1823	934	937	964	954	937	968	954	913	91	91
1835	936	938	964	953	946	954	967	921	912	91
1847	938	939	951	952	946	956	961	925	911	91
1859	936	939	959	959	967	966	967	927	912	91
1871	921	929	942	936	941	967	954	911	912	91
1883	919	928	949	925	911	958	964	910	909	91
1895	917	921	944	91	949	956	966	918	907	91
1907	909	927	944	916	966	953	964	916	908	91
1920	908	923	969	917	968	952	96	917	908	91
Average— 1811—1835	927	933	968	925	94	963	954	906	906	91
1861—1885	914	911	963	926	936	964	964	91	908	91
1891—1906	928	926	942	928	911	947	966	91	906	91

SUBSIDIARY TABLE IV

Number of female deaths per 1 000 male deaths in certain Provinces.

Year.	Assam.	Bengal.	Tiber and Orissa.	Bombay.	Burma.	Central Provinces and Berar.	Madras.	North-West Frontier Province.	Punjab.	United Provinces.
1	2	3	4	5	6	7	8	9	10	11
1811	928	966	944	928	972	964	966	967	942	91
1823	916	966	968	945	977	96	966	979	911	91
1835	909	923	915	924	964	967	966	966	916	91
1847	968	926	94	925	962	961	97	966	942	91
1859	968	91	937	946	96	976	979	973	922	91
1871	962	961	922	945	961	96	966	966	913	91
1883	964	976	928	967	966	976	971	977	916	91
1895	96	966	964	1,023	971	966	976	977	963	91
1907	967	966	91	966	966	967	979	966	963	91
1920	921	979	961	91	976	961	979	971	976	91
Average— 1811—1835	964	929	976	937	966	962	979	962	926	91
1861—1885	968	966	946	966	942	977	961	912	961	91
1891—1906	962	97	979	971	91	956	961	976	916	91

The figures for 1811 and 1812 include Delhi.

SUBSIDIARY TABLE V

Number of female deaths per 1 000 male deaths by age-periods in certain Provinces for the decade 1911-20 and for the year 1918

AGE.	BENGAL.		MADRAS.		MADRAS.		MADRAS.		MADRAS.		MADRAS.	
	Average of decade.	1918.	Average of decade.	1918.	Average of decade.	1918.	Average of decade.	1918.	Average of decade.	1918.	Average of decade.	1918.
0-4	979	977	967	962	966	979	962	964	964	964	967	967
5-9	924	971	972	971	966	962	962	962	962	962	962	962
10-14	936	923	936	946	962	1,007	956	954	964	964	964	964
15-19	927	945	945	971	1,006	1,153	967	96	967	966	962	962
20-24	1,254	1,251	962	914	1,134	1,176	954	942	1,072	1,04	1,234	1,219
25-29	1,714	1,136	91	953	1,22	1,221	966	961	1,179	1,04	966	966
30-34	962	97	966	972	936	1,039	956	91	966	966	979	96
35-39	966	976	966	97	94	964	967	96	97	966	953	96
40-44	962	966	972	954	977	96	962	966	96	966	966	966
45 and over	967	972	1,136	1,06	1,036	1,079	1,027	976	1,06	1,056	1,067	976

CHAPTER VII.

Civil Condition.

124 For the purpose of Civil Condition in the Indian Census the population is classified as unmarried, married or widowed. The instructions in the Enumeration Book were as follows — The return of Civil Condition.

“Enter each person, whether infant, child, or grown up, as either *married, unmarried, or widowed*. Divorced persons should be entered as widowed.”

These were supplemented by further instructions to the effect that a woman who had never been married was to be described as unmarried even though, as a prostitute or concubine, she had quasi-marital relations with a man. On the other hand persons who were recognised by their community as married were to be entered as such, even though they had not gone through the full ceremony, for example widows who had taken a second husband according to the rites recognised as applicable to them.

125 The customs and rites connected with marriage among the various communities in India have been described in detail in previous census reports. It will suffice to recall here that, though in ancient times there were forms of marriage recognized by Hindu law which were unaccompanied by any religious rites, marriage is now among Hindus and Jains a sacrament which must be attended by certain religious ceremonies. Recent discussion regarding proposed changes in the marriage laws shows that in this respect Hindu orthodox opinion is still remarkably conservative. With Christians a religious ceremony is in India practically universal though not legally essential. Among Muhammadans marriage is primarily a civil contract requiring a proposal and acceptance before witnesses to establish the marital agreement. The civil ceremony is however almost invariably attended by the relations of the contracting parties and accompanied by religious and customary rites, including the reading of passages from the Koran. Among Buddhists also marriage is regarded as a civil contract and as such it can be annulled at the instance of either party. Zoroastrians have a recognized religious wedding ceremony and the Tribes have their different rites and ordinances for validating matrimonial relations. Divorce is permitted in the lower strata of Hindu society and among the Tribes. It is legal among Muhammadans, Parsis, Christians and Buddhists at the instance of either party. Divorce, however, though fairly common in some communities, is almost always immediately followed by re marriage, and the influence on the statistics of widowhood of the number of divorces may be taken as entirely negligible. There is therefore in the return of Civil Condition little scope for ambiguity or inaccuracy. A few single women who are living in unregulated relations with men may have returned themselves as married and a few widows may have concealed their unpopular status by giving some other return, but on the whole the statistics may be taken as an accurate and complete classification of the population in the three prescribed classes of Civil Condition. It must be borne in mind however that the statistics of the married in India cannot be used without close analysis. Owing to the custom of infant and child marriage among Hindus and Jains the figures contain a large number of unions which are little more than irrevocable betrothals. A Hindu girl-wife as a rule returns after the wedding ceremony to her parent's house and lives there till she reaches puberty, when another ceremony is performed and she goes to her husband and enters upon the real duties of wifehood. At the younger ages therefore the wives are not wives at all for practical purposes. General conditions of marriage.

though their future lives are committed and from the eugenic point of view what is objectionable is not infant marriage itself but the extremely early age at which effective union takes place girls becoming mothers before they are fit for the condition of motherhood, with serious consequences both to themselves and to the children whom they produce.

Restric-
tions on mar-
riage.

126. In all societies there exist restrictions on marriage which are prescribed by religion, custom or law and are enforced by corresponding sanctions. These restrictions usually have for their object (a) the prohibition of the union of relatives and (b) the preservation of the purity of blood of the community by the prevention of unions with undesirable outsiders. In India such restraints on marriage are usually variants of three principles, endogamy exogamy and hy-pergamy. The application of these principles to the various sections of the Indian population has been discussed in previous census reports, and it was shown, as regards the first two that though the social restrictions may occasionally result in some temporary difficulty in obtaining a sufficient number of either brides or bridegrooms eligible in any particular community yet the structure of society is continually undergoing modifications and the rules, with the aid of appropriate fictions and a convenient incoherence are usually sufficiently elastic to secure that there should be no serious shortage in the matrimonial market. Thus it is reported that a paucity of brides among certain castes in Gujarat has led to the recent abrogation of the restriction on intermarriage between some of the sub-castes, and the well known traffic in brides from Rajputana and Central India into the Punjab owes its success largely to a discreet incoherence as to the origin and social status of the women produced. Hypergamy which roughly means that a woman must be mated into a family which is at least socially equal with and if possible is socially superior to her own, is a custom which has had and still has an enormous influence on the social and family life and on the position of women in the communities which observe it. It may have been the original cause of the prohibition of the re-marriage of widows and, by limiting the field of choice for women, it is certainly the main reason of the enormous expenditure which a daughter's wedding so often necessitates. It is undoubtedly responsible for the low sex ratio in some of the leading groups in the north of India and parts of the Bombay Presidency.

Polygamy.

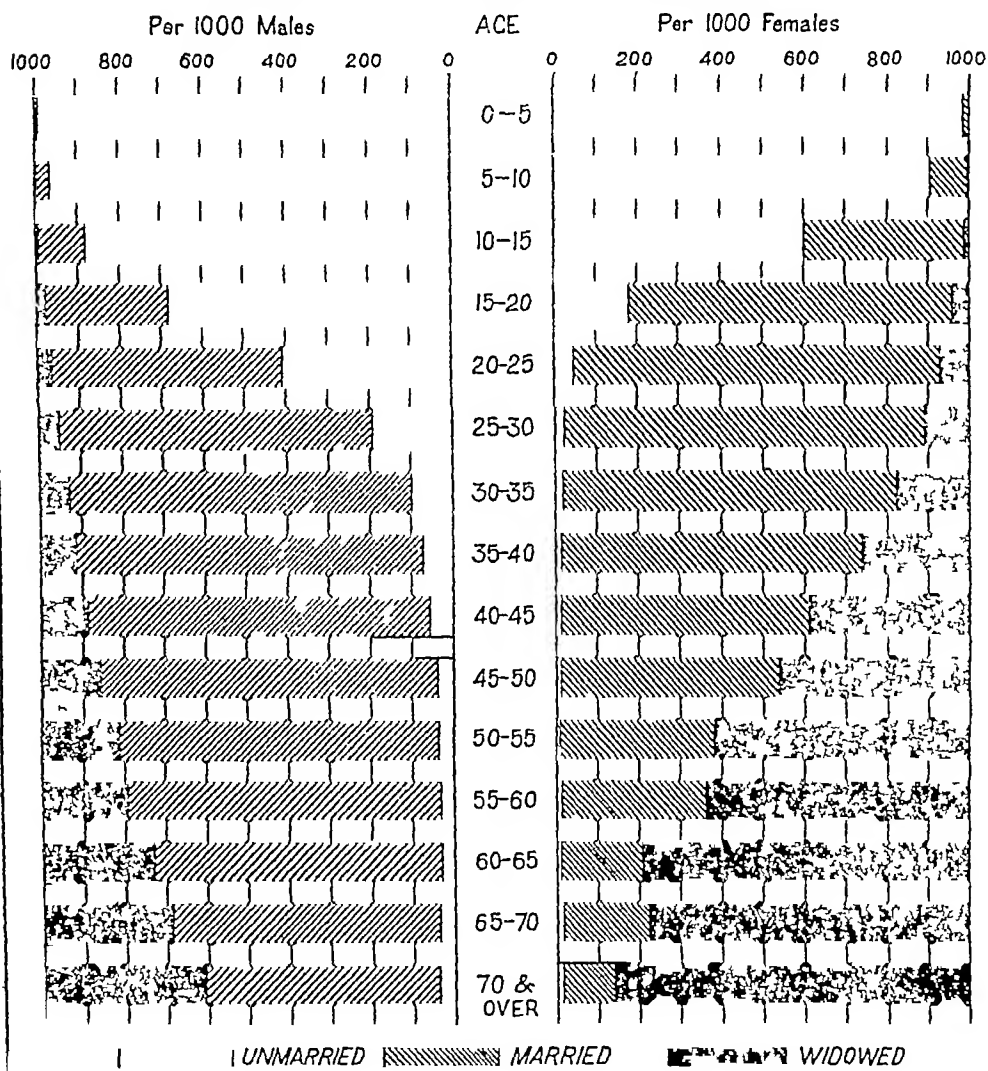
The subject of polygamy has been discussed fully in the report of 1911. Both Hindus and Muhammadans are allowed more wives than one, Muhammadans being nominally restricted to four. As a matter of practice polygyny is comparatively rare owing to domestic and economic reasons and has little effect on the statistics. The marginal table shows the number of married women per 1 000

Number of married females per 1,000 males	married men in India and the main provinces. No definite conclusions however can be drawn from these figures because (1) they probably contain a certain number of widows, divorcees and prostitutes who have wrongly returned themselves as married and (2) it is impossible accurately to gauge the effect of migration on the figures of the married in any area. The custom of polyandry is recognized as a regular institution among some of the tribes of the Himalayas and in parts of south India. It is also practised among many of the lower castes and aboriginal tribes. Its effect is reflected in the statistics of a few small communities such as the Buddhists of Kashmir where the proportion of married women to married men is exceptionally low but otherwise the custom is of sociological rather than of statistical interest.
India	1,008
Assam	979
Bengal	978
Bihar and Orissa	1,034
Bombay	987
Burma	934
C. P. and Berar	1,034
Madras	1,061
Punjab	1,021
United Provinces	1,013

State statistics.

127. The statistics of Civil Condition by age, sex, religion and province are exhibited in Imperial Table VII and in Imperial Table XIV figures are given for selected castes. The diagram and Table opposite show for males and females the proportion in each main age-group of the married, unmarried and widowed in the whole population of India. If we compare these statistics with those of any western country we are at once struck by three features in the Indian conditions: (a) the universality of marriage (b) the early age of marriage and (c) the large proportion of widows.

DIAGRAM & TABLE SHOWING THE PROPORTION OF UNMARRIED, MARRIED & WIDOWED PER 1,000 OF EACH SEX IN INDIA, 1921



Age	UNMARRIED		MARRIED		WIDOWED	
	Males	Females	Males	Females	Males.	Females.
0-5	994	988	6	11		1
5-10	966	907	32	88	2	5
10-15	879	601	116	382	5	17
15-20	687	188	298	771	15	41
20-25	402	51	564	877	34	72
25-30	194	25	752	863	54	112
30-35	98	10	826	797	76	184
35-40	62	15	847	727	91	258
40-45	52	14	825	599	123	387
45-50	41	13	812	527	147	460
50-55	39	11	797	370	194	619
55-60	37	12	742	352	221	636
60-65	35	11	684	193	381	796
65-70	38	15	648	207	314	778
70 and over	39	14	567	127	394	859

In the margin is shown the number of males and females in the population who are unmarried in various countries of the world. The proportion of the young in the population is a variable which influences these figures but as the proportion in India is higher than in most other countries this factor should tend to soften rather than exaggerate the contrast. By the age of fifteen the number of unmarried girls in India is already as low as 600 per mille while after twenty practically every female has been married. Among males the usual age of

marriage is higher husbands being older than wives. By far the majority of men are married by thirty and the number who remain unmarried after that age is insignificant. So far as the proportions in the reproductive ages are concerned it is the western not the Indian figures which are abnormal. Marriage is a natural condition for both men and women and celibacy and the postponement of marriage are the result of artificial circumstances and are rare in Asiatic countries. In India this natural instinct to marry and to bear and beget children has been encouraged by the precepts of religion which, among Hindus and Jains, make marriage a duty incumbent upon all, and in all Indian communities encourage the state of wedlock as necessary and desirable for both sexes and for the community in general.

Everybody marries, fit or unfit, and becomes a parent at the earliest possible age permitted by nature. For a Hindu marriage is a sacrament which must be performed regardless of the fitness of the parties to bear the responsibilities of a mated existence. A Hindu male must marry and beget children—sons, if you please—to perform his funeral rites lest his spirit wander uselessly in the wast places of the earth. The very name of son, *Putra*, means one who saves his father's soul from the hell called *Putra*. A Hindu maiden, unmarried at puberty is a source of social obloquy to her family and of damnation to her ancestors.

The Prophet also taught that when a man marries verily he perfects half his religion. With this encouragement and the example of the Hindus before them, to say nothing of the fact that a wife is an economic asset, it is not unnatural that marriage should be almost universal amongst Muhammadans also. In England on the other hand and in Europe generally part from the increasing influence of prudential considerations, there has always been the idea underlying the teaching of the Christian churches that it is good for a man not to touch a woman. Why asks Tertullian, should we long to bear children whom when we have them we desire to send before ourselves also longing to be removed from this most wicked world? St. Augustine admits that some persons ask, if all men abstain from sexual intercourse, whence the human race will exist, but he goes on: Would that all would thus (i.e., abstain) much more speedily would the city of God be filled and the end of the world hastened. Similarly the Council of Trent anathematized any person who declared that the married was better than the unmarried state. It is possible that the marriage rate in England to-day is not appreciably affected by teachings of this nature but the fact remains that under the influence of Christianity celibacy became for the first time in human history a factor of importance and that the tendency to refrain altogether from marriage has not in Christian countries met with that opposition from religion with which it is likely to meet in India.†

The number of males and females who are married by the age of twenty is 9 and 25 per cent. respectively of the population of each sex up to that age. In Italy the corresponding proportions are rather less than one in 1000 for males and rather more than one in 100 for females. The proportions are considerably less in western Europe but greater in the Balkans and Russia. In the latter country one male in 120 below twenty years and one female in thirty eight were married according to the figures of the census of 1897. The marriage of girls at an age when they are still children is a custom common among the Hindus and in other communities their marriage at or soon after puberty is practically universal. Mr. Thompson calculates on the basis of the age tables that the average age of marriage in Bengal is about 19½ for girls and rather under 20 for men.

† The Population Problem in India, by P. K. Mazumdar, page 2.
† Fisher and Oliver Report, page 143 (quotations from The Population Problem, by A. M. Carr-Saunders, page 241).

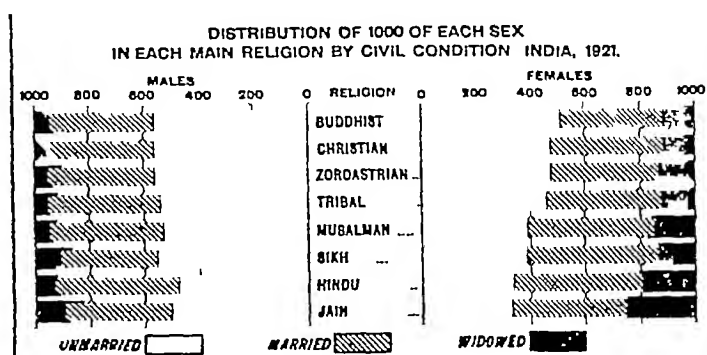
The proportion of widowers in the population, viz, 6.4 per cent, does not differ widely from the figure for European countries but the number of widows is strikingly large. The proportions for the whole population and for certain age-periods are given in the margin and compared with the figures for England and Wales. The large number of Indian widows is due partly to the early age of marriage partly to the disparity in the ages of the husbands and wives but chiefly to the prejudice against the re-marriage of widows. The higher castes of Hindus forbid it altogether and, as the custom is held to be a mark of social respectability, many of the more ambitious of the lower castes have adopted it by way of raising their social status, while Muhammadans who are closely brought into touch with their Hindu neighbours are apt to share the prejudice.

The large number of widows

Age	India 1921	England and Wales, 1911
All ages	175.0	73.2
0-5	7	
5-10	4.5	
10-15	16.8	
15-20	41.4	
20-25	71.5	1.5
25-35	146.9	13.1
35-45	325.2	50.5
45-65	610.4	193.3
65 and over	834.0	565.9

castes have adopted it by way of raising their social status, while Muhammadans who are closely brought into touch with their Hindu neighbours are apt to share the prejudice.

128 The distribution of the population by Civil Condition is largely determined by differences of custom, founded on or sanctioned by religion, and varies therefore considerably in the different religious groups. In the marginal diagram the statistics are shown for the main religions. There are special factors which have influenced the statistics in the last decade which will be considered later.



The main variations, however, are those which result from the different attitude of the communities towards marriage. The figures of the Hindu community display in special prominence the three characteristics which we have already noticed, and as Hindus form nearly three-fourths of the population of India they determine the character of the statistics of India as a whole. The Muhammadans have fewer married owing to the fact that their marriage age begins later, the proportion of females married below the ages of ten being half and between ten and fifteen about three-fourths of that of the Hindus. At the more mature ages the difference of custom as regards the re-marriage of widows is shown in the relative figures of the married and widows in the two communities. The Tribes marry later than Muhammadans and have more unmarried and fewer widowed, the difference being specially marked among the women. The Buddhists marry still later and have a large proportion of bachelors and spinsters, the proportion of unmarried women between fifteen and forty being as high as 13 per cent. The figures of the Christian community are to some extent artificial, as it contains large numbers of converts whose civil condition

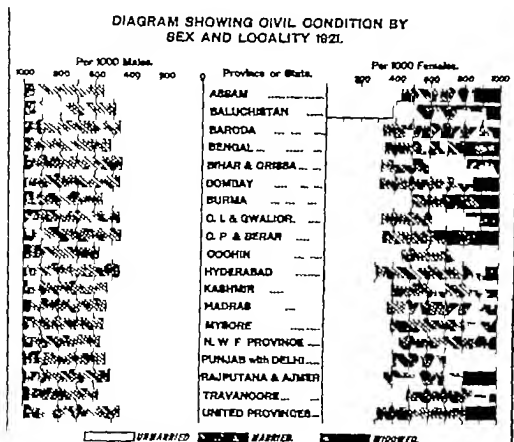
Number of married per 1,000 of each sex India 1921

Age period	HINDUS.		MUHAMMADANS		CHRISTIANS	
	Males	Females	Males	Females	Males	Females
0-5	7	14	3	6	2	3
5-10	42	111	14	50	7	15
10-15	144	437	66	344	26	85
15-20	359	814	241	815	133	510
20-30	677	871	656	901	548	841
30-40	831	755	858	799	856	815

was, up to the time of conversion, subject to the customs of other religions. This fact must, partially at any rate, account for the high proportion of married Christian girls of immature age observed in the Bombay and Baroda reports. The figures of both the Tribes and the Christians are probably influenced by the fact that they contain a high proportion of children in their population.

Civil Condition by
Provinces.

120 The regional figures of Civil Condition are given in detail in Table II at the end of the chapter and are illustrated in the diagram below



Taking the figures of those between fifteen and forty as against the mean of 290 for males and 82 for females, the proportion of the unmarried stands high in Burma with its Buddhist population who marry late. We recognize again the influence of Christianity in the South of India, Cochin and Travancore and of Islam in the North West Frontier Province figures. In the United Provinces, Central Provinces and Bihar and Orissa, where the population is Hindu or Tribal, the proportion of those who are not married at these ages is well below the mean. The number of married males at the age of 10-15 is negligible in Burma Cochin, Mysore and Travancore. In Assam and the North West Frontier Province it is 2 per cent. but everywhere else it is far higher. In Bengal Madras and the Punjab it is from 3 to 7 per cent. against 13 per cent. in Bombay and 21 per cent. in the Central Provinces and Berar and the United Provinces while in Bihar and Orissa which is still the home of child marriage, it reaches a maximum of 22 per cent. Among females the prevalence of infant marriage follows the same general direction but on a higher scale, except in Burma, where there are only four females in a thousand married at the age 10-15. Cochin and Travancore have 50 and 54 respectively while the proportion rises to 121 in the North West Frontier Province, 218 in Madras, 249 in the Punjab 441 in Bihar and Orissa and Baroda the highest proportion (570) being reached in the Hyderabad State. There are equally striking variations in the population of the widowed. Examining the proportions of widows at ages 15-40 we find that in the south of India Bengal Burma, the North West Frontier Province and Kashmir the ratios are 5 per cent. or less, while in other Provinces and States the proportion is between 5 and 9 per cent. Similarly the local proportion of widows is low (68 per mille) in the case of Burma where there is no prejudice against the marriage of widows. In Kashmir the North West Frontier Province and the Punjab where Hindu influences are weak, and also in Travancore where the advanced age of marriage for girls tends to reduce the number of widows. The proportion increases steadily from 102 per

mille in the Central Provinces to 106 in the United Provinces 128 in Madras, and 134 in Assam and Bihar and Orissa It is 137 in Bombay, 155 in Mysore and 169 in Bengal

130 The comparative figures of Civil Condition for five censuses are given in the following statement — (Comparison with previous censuses)

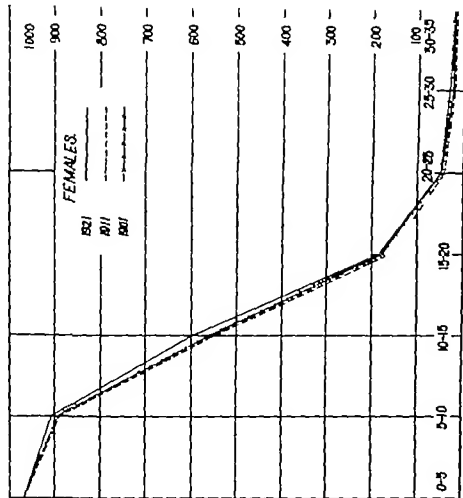
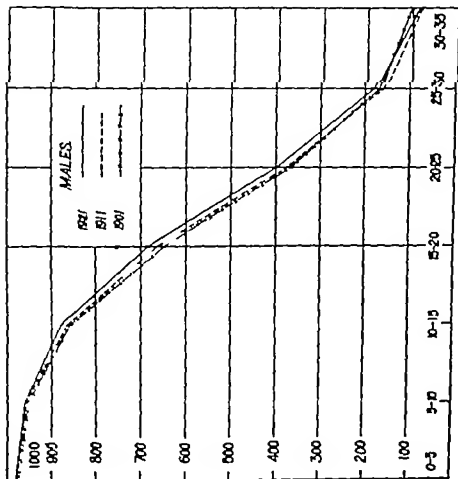
Distribution by Civil Condition of 1,000 of each sex and religion at each of the last five censuses

Religion	Unmarried					Married					Widowed				
	1871	1911	1901	1891	1881	1911	1901	1891	1881	1871	1911	1901	1891	1881	1871
INDIA															
MALES															
Hindu	489	490	492	487	481	439	430	424	405	407	61	54	54	43	49
Muslim	471	471	470	472	470	472	472	470	474	478	61	8	50	50	52
Mahomedan	51	27	26	510	51	418	421	432	410	415	1	40	42	41	40
Trinitarian	41	40	40	52	46	411	427	417	411	435	48	74	70	34	20
Christian	50	57	54	570	500	507	401	401	399	771	42	70	3	31	20
Buddhist	567	574	570	567	568	581	584	587	584	574	2	42	43	49	38
FEMALES															
INDIA	558	514	541	539	523	467	473	476	455	490	175	173	160	170	187
Hindu	552	517	521	519	507	477	495	48	495	490	101	188	101	166	197
Muslim	500	501	500	500	500	465	473	471	47	480	145	148	157	160	170
Trinitarian	450	450	442	467	445	418	406	410	421	447	127	114	130	111	108
Christian	474	460	460	450	440	417	421	409	400	708	117	118	120	124	167
Buddhist	10	10	10	10	10	775	775	775	775	775	115	115	115	115	115

The year 1911 ended in a period of comparative prosperity. There had been no widespread scarcity and, though plague was virulent in places, the mortality from it was distributed over a considerable period of time and was local in character. Economic conditions were on the whole favourable and mortality normal. The result was shown in a substantial rise in the number of the married and a decline in the number of the widowed. In the statistics of the present census we face the effect of exceptionally high and concentrated mortality together with severe economic pressure. The effect on civil condition has been both direct and indirect. We have seen that the age constitution of the population has changed. The proportion in the prime age periods, already depleted on account of the infant and child mortality of the famines twenty to twenty five years before, have further seriously declined owing to a mortality which selected these ages. We find this change reflected in an all round decrease in the proportion of the married, who chiefly occupy these depleted age periods, and a rise in the proportion of the unmarried following the increase in the young in the population. Again, within the adult periods, mortality has a double effect on our classification as, in annihilating the one party, it transfers the other to the "widowed" category and, since influenza mortality selected especially women, it increased in greater proportion the number of the widowers. In the earlier age-periods the economic pressure has made marriage more difficult and has thus tended to increase the proportion of the unmarried at periods when postponement of marriage was still possible. The change is conspicuous in all the communities but less so among Buddhists and Christians, and while in the latter community widows have increased, widowers have actually declined in proportion. Though the change in the age constitution is undoubtedly the principal factor in the statistics of Civil Condition, an examination of the figures in the various age periods suggests that there are other influences and that the age of marriage both for males and females is gradually rising.

131 The subject of early marriage is one of considerable interest and was dealt with fully in the report of 1911. It was shown there that the custom of child marriage, i.e., marriage before the age of ten, was most prevalent in Bihar and Orissa, Bombay, Baroda, the Central India tract and Hyderabad. It was rare in Assam, Burma, the North-West Frontier Province and the States of Southern India. It is not exclusively a Hindu custom, and of the Hindus who are most addicted to the practice it is among the lower rather than the higher castes that the custom is most rigidly observed. The practical effects of child marriage are

DIAGRAM SHOWING UNMARRIED PER MILE OF EACH SEX AT EACH OF THE LAST THREE CENSUSES FOR CERTAIN AGE-PERIODS, INDIA



extent also amongst girls the spread of school education has had a direct influence on the practice, since parents are often unwilling to withdraw their children from school for their marriage before their education is complete, though it has been suggested that this factor sometimes operates in an opposite direction where boys can by marriage obtain from the parents of the bride the means of pursuing their education into higher stages. It has to be remembered however, that while the educated classes are inclined towards the postponement of marriage both for men and girls, there is a strong countervailing influence in the tendency to the adoption of what is held to be an orthodox Hindu custom by those castes which are trying to better their status and hope, by exaggerated orthodoxy, to enhance their social respectability. It is difficult to estimate the comparative influence of these various factors. The circumstances of the latter part of the decade have been exceptional, and until we have the evidence which the figures of another census will supply it would be rash to attribute to any radical change of custom a variation which is possibly the outcome of special economic conditions.

132 The main statistics regarding the distribution and progress of early marriage are given in the marginal table and illustrated

Year	Number unmarried per mille males aged		Number unmarried per mille females aged	
	10-15	15-20	5-10	10-15
	—	—	—	—
1921	571	687	907	691
1911	565	665	891	575
1901	560	650	893	579
1891	541	621	874	491
1881	513	617		451

in the map on page 158 and the diagram on the opposite page. Whatever be the causes to which the change may be attributed the figures clearly show an increase in the numbers of those in the early age categories who are still unmarried. The movement is most marked in the Hindu community but is shared by the other religions, the change being less noticeable among the Buddhist and Christian communities who are not addicted to early marriage. The change is most conspicuous in the age categories 10 to 15 for women and 10 to 20 for men. Some analysis of the regional and communal figures will be of interest. In Bengal and Bihar and Orissa the rise in the age of marriage is marked. The number of males left unmarried between the ages of 10 and 15 has risen from 826 in 1891 to 868 in 1921, the increase in the age-period 15 to 20 being from 594 to 665. The case of girls is still more striking, the figures being given in the marginal table, and for both males and females the rise during the last decade has been exceptionally high. Commenting on those figures, Mr Thompson writes —

BENGAL AND BIHAR AND ORISSA
Number unmarried per mille females aged

Year	5-10	10-15
	—	—
1921	891	494
1911	851	422
1901	836	402
1891	827	372

"It is apparent from these figures that both in Bengal and in the two provinces together there has been a steady rise in the average age at which marriage takes place. This age both for males and females is very much lower in Bihar and Orissa than in Bengal, but in both it is rising and the rise has apparently been more decided during the last decade than in previous ones. This may have been due in part to the fact that the last few years were hard times, and the greater difficulty of scraping together the money necessary to be spent on the price to be paid for the bridegroom, the dowry and ornaments for the bride and the actual expenses of the ceremony may have caused some marriages to be postponed, but the tendency of public opinion to favour later marriages has been a very significant one. It has not made any appreciable impression on the rule that a girl must be married as soon as she has attained puberty, for the proportion of girls unmarried between 15 and 20 is still only 55 per mille and only 39 per mille in the case of Hindus, but the practice of marrying girls very much before they reach puberty is steadily becoming less common."

The tendency varies considerably among different castes in Bengal. The Brahmins and Baidyas take the lead in postponing the age of marriage of both boys and girls and the Bengali merchant class, the Shahas, follow closely. The Chasi Kaibartta, representing the Hindu cultivating class, have raised the age for males but still favour the early marriage of girls, while the Bansis, the labouring class of Western Bengal, who were in the habit of delaying the marriage of their girls till they were grown up, now imitate the Hindus in marrying their girls young. Those Santals who have adopted Hinduism also tend to imitate the Hindu custom and marry their girls earlier than those who retain their tribal beliefs. Among Muhammadans

the Sanyas, who are typical of the better class, show a strong tendency towards the postponement of marriage both for boys and girls. The Darbhanga district of North Bihar is still the home of infant marriage. In that district 64 boys and 103 girls between 0 and 5 are married out of every 1 000 of each sex at that age. The practice obtains also in the neighbouring districts of Munzaffarpur and Bhagalpur and appears to extend also to the Muhammadans of this tract. In Madras early marriage is commonest among the Kalings and Kalpis of the Ganjam and neighbouring districts, and there is no sign of any tendency to postponement. Special sortings were made of over 720 thousand slips of women over 15 years old returned as unmarried. The result was entirely negative. "Adult women who remain unmarried are of all castes, they follow all occupations and the proportion of literate among them is no greater than it is in the female population as a whole."* In the United Provinces the statistics show a general tendency towards the postponement of marriage throughout the population which can probably be attributed to motives of economy. Generally speaking the higher the caste the later the age of marriage. Mr Edye thinks that the prevalence of bachelorism in the higher castes is often due not so much to any shortage of women as to the interests of school going. The proportion of children, both boys and girls, under twelve who are married is highest among the Kurmis, Pasas, Kumbhars, Ahirs and Chamars and low for both sexes among the Sanyas, Janyas and Sheikhs and in the case of girls the Agarvals and Jats. In the Central Provinces early marriages are most common in the Maratha plain division, and the fact that little tendency is shown by the figures towards any modification of this practice in this rich and prosperous tract suggests that the causes of change elsewhere are largely economic. In the Hyderabad State early marriage is more usual in the Marathwara portion of the State than in Telangana, and the practice which is most prevalent in the lower castes seems to have spread to some extent to the Muhammadan, Christian and Tribal communities. Even the Gonds show as many as 24 per 1 000 girls married before five years of age and the proportion for the Lambadas is higher still (28). In Bombay Mr Sedgwick shows that the proportions of females still unmarried in the early age-periods, though lower than in 1911 do not differ materially from those of 1891 and is of opinion that there is little evidence at present of any change of custom and that the chief influences affecting the present figures are probably the change in the age constitution of the population, economic pressure and the occurrence in the census year of the Sinhast festival when marriages are prohibited.

Legislation affecting marriage.

133 In the States of Baroda and Mysore early marriage is the subject of State legislation. The law in Baroda (*Infant Marriages Prevention Law of 1904*) defines the age at which marriage is permissible—twelve years for girls and sixteen years for boys. Exceptions are granted in the case of girls between the age of nine and twelve in special cases, and in the case of the Kadwa Kanbi community who are accustomed to hold periodical mass marriages, the age has been lowered to six for girls and eight for boys. The Act has been more strictly enforced during the decade and the numbers of convictions under it average about 4,050 per annum.† It is difficult to gauge to what extent this statutory sanction contributes to the fall in the number of infant marriages, but, as was remarked by my predecessor the indirect effect on public opinion of a definite attitude of the State towards the practice cannot but be beneficial. In Mysore the *Infant Marriages Prevention Regulation of 1894* prohibits the marriage of a girl under eight years of age, as well as of the marriage of a man of fifty or over with a girl under fourteen. The Act has been administered with considerable leniency during the decade only eighty-six persons having been convicted under it, and the Census Superintendent evidently doubts whether the Act has had any practical influence on the statistics.

Madras Report Chapter VII para 18.

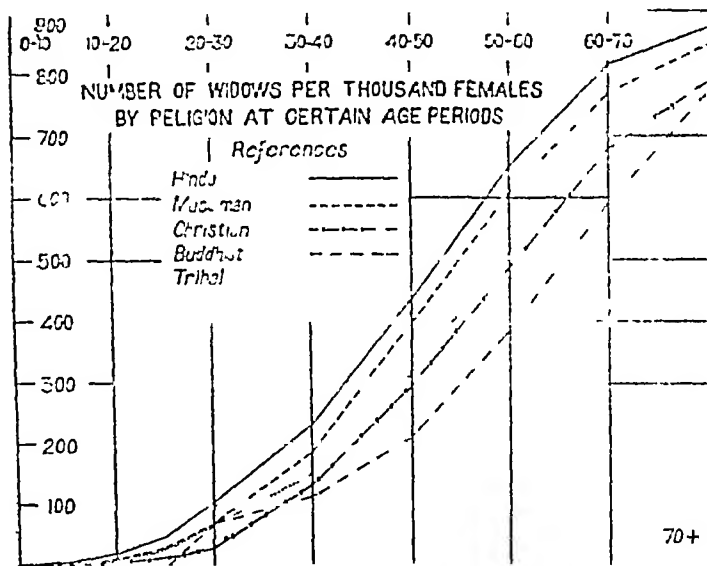
† The Baroda State has passed an act for the compulsory registration of marriages and divorces in order to give legal effect to them. The act is not intended to effect social or religious reforms or rites of any kind. According to the new law marriages and divorces must be registered within four weeks of the occurrence and be registered with the registrar with the parent of the bride or her guardian or the bridegroom. A certificate must be made of the marriage or divorce and if it be not valid according to the law of the country it is not to be considered the validity of marriage except in the case of Mohammedans. Parties not registering marriages or divorces are liable to a fine not more than Rs. 10.

134 We saw in para 130 above that the effect of the high mortality at the end of the decade was (a) to increase the proportion of the population in the higher age groups, when widowhood is most usual, and (b) to increase the number of the widowed in those age periods when the married usually predominate. The general prosperity of the decade 1901 to 1911 had sent the

Numbers per 1000 in each 10 years are indicated

Province or Agency	Males			Females		
	1901	1911	1901	1911	1901	1901
India	59	44	47	178	124	137
Bengal	30	71	31	232	224	210
Bihar and Orissa	17	40	41	172	12	120
Bombay	5	40	63	156	117	148
Burma	74	25	26	40	41	50
C. P. and Berar	2	71	61	104	78	12
Madras	22	21	24	131	120	171
Punjab	70	64	60	64	106	84
United Provinces	70	64	61	111	104	102
Rajputana (Agency)	86	50	81	141	108	152

numbers of the married up. In the present census the figures particularly in those areas in which the influenza epidemic was specially virulent, show a reversion to the condition of 1901 when the census followed the heavy famine mortality. While, however, famine selected adversely to males the influenza mortality was highest among females, and, though it has increased the number of the widowed generally, more widowers have been created than widows. That the mortality factor determines the statistics is undoubted but other influences have also been at work. The prejudice against the re-marriage of widows is deep seated in Hindu social opinion. It is true that the disadvantages of the custom to society as well as the evils which the unfortunate class have to suffer especially those condemned in infancy to life-long widowhood are now being realised by the more advanced classes. A considerable number of societies have been formed in different parts of India with the avowed object of encouraging the re-marriage of widows. One of the most successful of these has its headquarters in the Punjab where owing to the well known paucity of women and the traffic



in imported brides, there seems considerable scope for its enterprise, and is conducted on the principles of the *Sanatan Dharma* as a Hindu institution. The Sabha claims to have caused the marriage of over 300 widows in the year 1921 and to have over 4,000 men registered in its books who desire to find widows to marry, and the latest

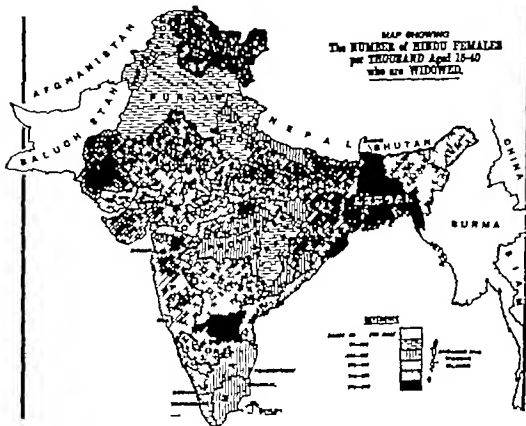
report shows figures of marriages and applications in 1922 considerably larger than those quoted. Similar societies exist in Bengal, Bombay and South India, while the Arya Samaj and other protestant religious sects are attempting to free the community from this obsolete restriction. On the other hand the increasing difficulties experienced in obtaining suitable husbands for unmarried girls operate, in some classes, against a reform which would have the effect of still further increasing the competition for husbands, while, in any case, the movement is so far almost entirely restricted to the more educated and advanced sections of Indian society and its influence on the statistics is at present negligible. The few infractions of the rule which occasionally take place in the more educated grades of society are still celebrated in the "reformed" press by congratulatory notices. There is, on the other hand, some reason to suppose that the restriction in widow re-marriage is actually increasing among the classes in the lower ranks

of the social scale and is likely still further to increase. The custom is one which, more than any other is associated with Hindu orthodoxy and it is in consequence one of the first to be adopted by an ambitious community which is attempting to better its social condition. To imitate the customs of the highest classes is to acquire some increase of tone and respectability and this desire to better their status which, as the country develops, is gaining in extent and intensity especially among the depressed classes and the aboriginal tribes, finds its first expression in an assumption of the most characteristic and imposing traditions of the twice-born castes. After quoting some instances of communities who are trying to revive the custom of widow re-marriage, Mr Mukerjee of Baroda, writes —

All these are however tentative and more or less individual efforts. No concerted action or wholesale movement is yet apparent. The truth is that all such efforts are and will be powerless so long as authoritative Hindu opinion continues to regard the prohibition of widow re-marriage as badge of respectability. Amongst the lower Hindu-castes, the socially affluent sections are discountenancing the practice of widow re-marriage as actively as any Brahman or V. m. Gradually this question is becoming a potent cause of fission in these communities—the sections disallowing widow re-marriage being hypergamous to the rest that allow it.

In the United Provinces, although the Bhunhars (240) Brahmans (234) Kayasthas (210) and other high castes have the highest proportion of widows, the figures

suggest a tendency among the lowest castes to regard widow re-marriage with increasing disfavour. The Parsis, Bhangis, Chamars and Dhobis all have appreciably more widows than they had ten years ago. In the North West Frontier Province the Chamars, Chuhars, Jhinwars, Machhis and Telis actually have a higher proportion of widows than the high caste Hindus. Similarly the proportion of widows per 1 000 females among the Goals, who are the largest caste in Bihar and Orissa and have been making constant efforts to raise themselves in the Hindu scale, has increased slightly from 168 to 173. But all these individual statistics must be interpreted with considerable caution, owing to the effect already discussed of the differential mortality in the decade which, as in the case of early marriage, renders doubtful any conclusion from the figures as to the tendencies of social custom.



SUBSIDIARY TABLE I

Distribution by civil condition of 1,440 of each sex, religion and main age-period at each of last five censuses.

[illegible]

SUBSIDIARY TABLE II

Distribution by civil condition of 1,000 of each sex at certain ages in each Province State or Agency

ALL RELIGIONS.

Province, State or Agency.	15-20.			20-25.		25-30.			30-35.			35-40.			40 and over.		
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Males.																	
INDIA.	396	428	94	964	8	960	96	8	878	114	6	380	925	23	63	799	397
Ajmer-Merwara	406	412	90	962	1	966	41		841	37	13	273	630	93	36	692	321
Assam	55	393	51	1,000		999			977	23		364	364	31	37	36	136
Bengal	51	444	39	999		999			999	49		999	971	35	36	945	36
Bihar and Orissa	434	436	96	969		91	96	3	796	223	11	218	729	36	37	796	45
Bombay	484	479	96	999	30	944	34		836	136	7	544	702	33	36	793	
Burma	530	999	55	1,000		999			999			447	31	37	79	799	392
Central Provinces and Berar	432	468	91	993		95			713	31		135	796	36	31	794	113
Coorg	442	946	36	999		994			991		3	79	999	36	36	799	113
Dacca	436	484	96	999		980	19	1	651	36		273	636	36	47	677	279
Madras	431	452	21	999		999	36		999	31		993	994	37	36	999	143
North-West Frontier Province	460	452	21	999		999			977	23		993	994	36	36	773	179
Punjab	432	452	91	999		917	96	3	92	72		999	999	36	36	999	399
United Provinces	433	454	91	999		913	96		178	31	9	993	994	36	36	999	399
Rajputana	443	453	94	999		913	96		993	31	11	229	999	79		794	313
Central India (Agency)	461	444	73	944	15	94	96		773	31	11	418	543	36	33	999	149
Cochin State	273	991		1,000		1,000			997	3		418	543	36	33	993	239
Orissa State	79	421	93	973	33	993	43		31	179	13	236	994	31	33	993	239
Hyderabad State	437	478	97	993		913	16		913	16	16	223	799	36	36	993	193
Kashmir State	569	19		999		999	13		913	96	3	91	999	47	36	993	193
Mysore State	536	999	41	999		999	1		994		7	929	974	36	33	773	979
Rajputana (Agency)	511	393	94	999		977	31		993	199	7	399		36	47	323	37
Tamil Nadu	377	999	31	1,000		999			99			43	54	23	43	323	137
Females.																	
INDIA.	960	967	179	999	11	999	96	4	991	999	17	99	91	194	13	999	979
Ajmer-Merwara	336	33	96	999	19	979	196		573	11	1	36	936	123	7	979	993
Assam	439	13	16	1,000		993			753	239		54	779	34		397	993
Bengal	513	499	197	993		977	99		499	314	33	23	649	199		39	793
Bihar and Orissa	328	46	41	991	15	16	46	8	993	44	34	94		134		996	943
Bombay	529	499	199	973	39	937	33		41	239	36	31	321	137	13	673	17
Burma	919	977		999		999			994			91		36	36	999	999
Central Provinces and Berar	323	497	36	973	17	96	13		494	992	39		254	199	13	99	541
Coorg	446	279	68	993	1	979			955			144	719	134	13	236	434
Dacca	346	341	31	999		913	33		999	913		23	997	79		477	31
Madras	379	434	46	999		993			773	31	79	79	79	129	19	391	999
North-West Frontier Province	449		14	999		994			97	123		191	939	79		553	977
Punjab	493	493	34	994		339	46		719	219		9	994	73	7	1	973
United Provinces	31	599	73	993	13	999	191		499	699	34	31	943	96		637	334
Rajputana	239	691	397	993		46	113		377	611	13	37	534	793	9	43	134
Central India (Agency)	913	46	177	97	2	999	139		994	13	33	99	633	96	1	993	991
Cochin State	436	999	54	1,000		999			943	34		96	739	1	13	244	13
Orissa State	327	473	194	973	36	979	113		451	323	36	34		43	37	244	13
Hyderabad State	999	49	194	79	23	794	399	79	399	79	34	7	39	123	24	993	991
Kashmir State	394	973	121	994		77	34		633	939	9	67	97	99		999	999
Mysore State	391	994	999	999		993			999	793		99	933	134		399	999
Rajputana (Agency)	513	437	194	991		999	79		949	999	13	39	933	134		999	999
Tamil Nadu	473	239	121	1,000		994			94	34	3	191	771	73	73	699	97

NOTE.—The proportions for Free towns include the States attached to them, except in the case of Madras, where they exclude the same and Free towns.

SUBSIDIARY TABLE II.—*conold.*Distribution by civil condition of 1,000 of each sex at certain ages in each Province, State or Agency—*conold.*

MUSALMAN

PROVINCE, STATE OR AGENCY	13-14			15-16			17-18			19-20			21 and over		
	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
Males.															
INDIA.	821	418	81	807	8	806	18	821	80	8	817	848	88	82	796
Ajmer-Merwara	445	78	82	996		978	8	804	97	7	806	882	70	80	786
Bombay	821	881	82	1,000		987		862	8		843	831	81		840
Bihar and Orissa	824	430	97	806		800	10	840	80	1	876	809	80	801	81
Bombay	477	40	882			818	83	781	80	7	818	7	41	80	832
Bombay	800	430	80	80		877	23	821	78		881	812	47	80	776
Bombay	800	467	41	1,000		1,000		868	73		800	840	87	80	783
Central Provinces and Berar	498	444	882			879	30	800			830	440	81	80	878
Coorg	315	438	80	1,000		1,000		800			800	800	80	80	800
Dacca	461	481	72	1,000		800	70	800	70		800	800	80	80	800
Madras	878	887	34	800		807		800	18		820	84	80	80	800
North-West Frontier Province	87	878	1,000			800		877	80		870	828	80	1	800
Punjab	838	370	70	800		800		838	80		838	878	70	80	773
United Provinces	470	47	80	800		878	23	800	80		807	823	80	80	773
Bombay State	480	877	77	803		878	23	800	80		877	838	84	80	776
Central India (Agency)	461	481	72	800		800	30	800	80		817	840	81	80	800
Cochin State	803	377	23	1,000		1,000		807	8		800	813	73	84	770
Coastal State	487	480	82	872		803	81	800	18		800	800	80	80	800
Hyderabad State	807	427	84	800		803	30	800	80		807	830	84	80	800
Kashmir State	303	18	80	800		800	1	800			800	800	80	80	800
Kyaukse State	370	800	40	1,000		1,000		800			800	800	80	80	800
Rajputana (Agency)	300	10	80	800		878	27	800	100		800	8	23	80	800
Tamil Nadu	800	873	80	800		800		800			800				800
Females.															
INDIA.	800	408	100	800		807	80	804	844	12	80	840	80	13	820
Ajmer-Merwara	824	300	80	804		828	7	800	801		80	800	84	13	800
Bombay	430	430	40	1,000		801	10	804	823	1	84	823	1	8	807
Bombay	873	72	83	891		830	80	800	840		80	820	80	1	800
Bihar and Orissa	820	480	72	912		878	130	801	830	1	7	830		15	800
Bombay	801	463	802			822	78	800	87	1	378	724	80	81	84
Bombay	311	800	80	1,000		800		800	803			84	80		800
Central Provinces and Berar	803	434	104	803		800		803	102	12	81	87	1	7	820
Coorg	844	420	80	800		1,000		87	840		1	800	81	13	817
Dacca	303	803	12	800		800	80	877			80	844	100	80	80
Madras	41	70	807			800		870	17		803	809	84	81	824
North-West Frontier Province	412	412	1,000			800	2	800	18		80	820	80	80	812
Punjab	870	43	800			87	23	81	870	10		872	77	1	87
United Provinces	854	301	84	804		875	23	80	820		84	800	80	80	800
Bombay State	834	7	371	803		830	72	820	820	5	82	840	800	80	80
Central India (Agency)	853	70	100	800		800		803	87		7	87	87	13	804
Cochin State	482	804	122	1,000		81		812	84	80		820	807	23	800
Coastal State	300	400	73	871		81	80	713	872		73	80	13	80	800
Hyderabad State	300		80	800		800	80	800	804		80	804	80	1	800
Kashmir State	432		13	800		800		800	80		80	80	80	1	800
Kyaukse State	872	472	54	912		872	80	807	830		80	837	73	73	800
Rajputana (Agency)	80	400	807	800		807		814	80	2	80	74	73	73	800

SUBSIDIARY TABLE III

Distribution by main age periods and civil condition of 10,000 of each sex and religion.

PROVINCE AND AGE	MALES			FEMALES		
	Unmarried	Married	Widowed	Unmarried	Married	Widowed
	1	2	3	4	5	6
All Religions	4 978	4 334	638	3,578	4,671	1,751
0-10	2 617	2 011	317	2,617	146	8
10-15	1 093	14	7	6 40	411	18
15-40	1 177	2 300	206	14	3 210	497
40 and over	91	1 021	422	27	872	1 270
Hindu	4 782	4 520	686	3 320	4,766	1,914
0-10	2 33	68	4	2 12	180	9
10-15	1 040	179	9	782	169	22
15-40	1 117	2 618	223	171	1 215	551
40 and over	91	1 671	47	21	602	1,372
Musalman	5 309	4 176	515	3 896	4,649	1,455
0-10	2 878	20	2	2 974	91	6
10-15	1 181	81	3	691	371	12
15-40	1 227	2 474	168	207	3 386	396
40 and over	6	1 592	712	21	501	1 041
Christian	5 649	3,931	420	4 744	4,131	1,125
0-10	2 68	11	1	2 827	26	2
10-15	1 227	32	7	1 176	106	3
15-40	1 689	2 501	120	701	3 039	270
40 and over	75	1 87	297	77	910	841
Tribal	5 414	4 108	478	4 585	4 185	1,200
0-10	3 028	28	7	3 061	51	4
10-15	1 199	77	3	926	194	9
15-40	1 124	2 794	187	577	3 010	3 11
40 and over	17	1 001	286	41	970	866
Buddhist	5 668	3 807	525	5,101	3,747	1,149
0-10	2 533	2		2 571	1	
10-15	1 220	2		1 140	5	
15-40	1 768	2,052	148	1 296	2 476	277
40 and over	145	1 753	177	117	1,265	872

SUBSIDIARY TABLE IV

Proportion of sexes by Civil Condition in the main provinces

Proportion of Sexes by Civil Condition							
Province and Religion	NUMBER OF FEMALES PER 1000 MALES			Province and Religion	NUMBER OF FEMALES PER 1000 MALES		
	All Ages				All Ages		
	Unmarried	Married	Widowed		Unmarried	Married	Widowed
1	2	3	4	1	2	3	4
India.	680	1,008	2,596	Burma	871	924	2,094
Hindu	601	1 006	2 658	Buddhist	927	1 011	2 230
Buddhist	922	1 008	2 241	Musalman	572	539	1 734
Musalman	608	1 013	2 570	Tribal	786	896	2 231
Christian	785	983	2 507				
Tribal	844	1 015	2,565				
Assam	715	976	2,832	Central Provinces and Berar	756	1,024	2,066
Hindu	684	912	2 622	Hindu	744	1 023	2 658
Musalman	676	1,005	4 460	Musalman	698	936	2,639
Tribal	885	1,013	2 179	Tribal	845	1 061	2,784
Bengal	617	966	4,856	Madras	722	1,061	4,406
Hindu	570	909	4 545	Hindu	715	1,061	4 424
Musalman	660	1 014	5,505	Musalman	737	1,091	5,241
Buddhist	780	1 024	2 907	Christian	834	1 012	1,226
Bihar and Orissa	745	1 034	3,129	Punjab	621	1,021	1,268
Hindu	730	1,029	3 091	Hindu	595	1 009	1,318
Musalman	747	1 074	3 676	Musalman	650	1 028	1 282
Tribal	880	1 036	2 921	Sikh	637	1,033	1 008
Bombay	646	987	2,384	United Provinces	638	1,013	1,730
Hindu	654	992	2 524	Hindu	629	1 002	1 760
Musalman	609	978	1 780	Musalman	692	1 021	1,506
Jain	603	904	2 522	Christian	638	1 007	1,444

202

TABLE V

each sex at certain ages for selected castes.

[illegible]

TABLE V—contd

each sex at certain ages for selected castes—contd

DISTRIBUTION OF 1000 FEMALES OF EACH AGE BY CIVIL CONDITION

DISTRIBUTION OF 1000 FEMALES OF EACH AGE BY CIVIL CONDITION																				
ALL AGES			0-4			5-12			12-20			20-40			40 AND OVER			CASTE.		
Unmarried.	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed			
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37			
Central Provinces and Berar—contd																			38	
245	492	163	970	23	1	796	191	13	233	978	80	33	843	122	44	460	496	Kalar		
232	378	160	961	33	1	493	184	21	67	864	69	10	865	125	7	430	563	Kunbi		
330	404	200	983	13	1	740	120	23	215	608	177	71	860	179	87	446	467	Kurmi		
330	503	167	991	8	1	798	193	0	236	700	44	17	864	110	0	462	529	Lodhi		
376	472	152	984	14	2	823	163	0	340	822	69	6	824	126	32	510	463	Lohar		
324	378	188	958	34	3	482	498	20	100	834	66	12	866	122	7	411	542	Mali		
263	525	210	977	20	3	601	383	10	151	793	56	20	790	178	11	404	535	Mehra		
290	480	221	983	14	1	742	234	24	160	704	130	23	805	172	39	417	544	Rajput		
309	538	153	960	31	3	671	316	13	198	730	60	25	850	123	17	519	464	Teli		
Madras																				
356	416	228	991	8	1	930	52	9	433	532	35	31	774	103	15	343	642	Ballia		
283	480	233	983	15	1	929	69	2	182	772	40	12	824	164	3	367	640	Brahman (Tamil)		
261	471	268	993	6	1	800	193	7	93	814	93	1	744	249	0	307	687	Brahman (Telugu)		
412	386	202	1000	0		994	5	1	588	38	27	56	750	188	1	318	667	Cheruman		
334	460	177	994	0		970	18	3	603	380	15	65	803	132	12	400	492	Chetti		
426	439	133	994	0		990	38	2	498	482	40	62	802	130	27	561	412	Kaikoan.		
263	408	220	990	48	2	662	324	14	200	746	54	13	780	201	0	353	661	Kapu		
277	482	241	993	5		823	172	5	140	797	63	21	736	223	6	365	629	Konati		
344	483	173	993	5		893	103	4	262	700	33	19	837	144	8	446	547	Mala		
301	462	147	992	7	1	960	38	2	448	531	17	29	861	106	10	436	534	Paraiyan		
454	368	178	1000	7		990	4	2	632	288	30	83	720	188	19	420	561	Tiyar		
300	434	178	992	7	1	976	22	2	633	330	17	43	821	134	16	460	518	Vellala		
North-West Frontier Province																				
406	418	110	1000			980	11		606	326	8	51	872	77	18	541	441	Awan		
Punjab																				
376	419	203	998	2		961	37	2	318	648	34	6	780	114	3	372	695	Agarwal (Hindu)		
368	484	148	999	1		920	78	2	200	776	13	2	891	107	11	483	517	Ahlu (Hindu)		
427	407	106	999	1		942	57	1	465	526	0	2	907	66	8	581	411	Arain (Muslim)		
403	434	163	998	2		966	33	1	455	522	3	21	945	134	10	437	563	Arora (Hindu)		
419	448	133	1000	1		977	22	1	543	446	11	42	880	78	10	518	472	Awan (Muslim)		
427	471	102	999	1		978	21	1	531	460	0	26	917	57	12	607	381	Bloch.		
360	417	123	999	1		826	172	3	197	780	18	4	914	82	2	518	480	Chamar (Hindu)		
413	44	113	999	1		969	30	1	573	416	0	40	800	70	16	556	429	Jat (Muslim)		
418	466	116	998	2		930	68	2	413	564	23	17	917	66	6	541	453	Jhinwar (Muslim)		
344	609	147	990	1		870	116	5	242	738	20	10	888	102	13	461	524	Juleha (Hindu)		
302	553	167	992	8		862	133	3	323	646	26	15	885	100	0	406	498	Kanet (Hindu)		
416	439	146	1000			974	23	1	554	432	14	30	895	83	8	502	490	Kahtiri (Muslim)		
394	424	182	999	1		973	26	1	499	481	20	20	834	146	5	434	561	Khatti (Hindu)		
369	401	140	996	4		865	133	2	244	740	16	5	899	96	4	471	525	Kumhar (Hindu)		
430	447	117	999	1		957	42	1	496	494	10	27	901	72	0	548	443	Kumhar (Muslim)		
331	501	148	998	2		870	121	3	276	702	22	14	887	99	0	483	508	Lohar (Hindu)		
422	403	11	999	1		949	50	1	464	524	12	20	912	68	0	546	445	Lohar (Muslim)		
453	439	105	999	1		977	22	1	543	440	8	26	911	63	15	557	428	Macchi (Muslim)		
427	443	130	999	1		937	42	1	533	453	12	37	880	74	14	516	470	Mirasi (Muslim)		
433	448	114	998	2		971	23	1	511	480	9	24	910	66	9	556	433	Mochi (Muslim)		
350	476	166	999	1		901	96	3	284	690	17	6	878	116	4	440	556	Nai (Hindu)		
433	446	121	999	1		936	41	1	513	473	14	29	900	71	14	538	448	Nai (Muslim)		
420	448	126	999	1		980	20		563	422	10	34	885	81	12	640	448	Pathan.		
331	402	207	999	1		902	95	3	330	638	32	25	816	130	0	370	615	Rajput (Hindu)		
434	429	137	999	1		937	41	2	561	428	11	36	863	101	0	501	490	Rajput (Muslim)		
427	473	140	998	2		976	23	1	570	418	12	50	848	102	16	520	464	Salyid		
398	472	130	998	2		933	61	2	456	531	13	10	892	89	7	524	469	Sheikh.		
430	457	113	999	1		968	31	2	506	481	13	27	905	68	9	566	425	Tarkhan (Muslim)		
420	460	120	999	1		935	63	2	429	560	11	13	916	72	3	523	467	Teli (Muslim)		
United Provinces																				
338	439	203	978	14	8	944	57	9	323	606	71	50	784	186	20	407	573	Baniya		
316	519	163	986	13	1	776	217	7	260	703	37	17	854	129	11	471	518	Ahlu		
332	502	166	991	8	1	877	118	5	242	704	54	20	839	121	17	471	512	Barhai		
363	407	150	982	12	6	841	150	9	244	676	70	40	844	116	27	475	498	Bhangl		
310	460	234	983	10	2	885	107	8	295	648	57	19	778	203	10	384	606	Brahman		
318	324	138	982	14	4	770	212	9	191	701	48	13	869	116	9	464	527	Chamar		
333	507	138	970	10	5	830	163	7	234	712	11	23	858	119	16	471	513	Dhobi		
316	418	166	987	11	2	794	196	10	188	701	50	18	830	132	12	463	525	Gadaria		
333	499	168	977	21	4	885	109	6	260	686	41	21	857	122	17	457	526	Gujar		
348	402	160	980	18	2	906	87	7	276	678	46	31	847	122	24	477	499	Jat.		
352	517	131	987	11	3	823	171	4	271	707	22	20	890	81	12	513	475	Jatula		
345	402	163	982	15	3	860	127	7	259	694	47	28	831	123	15	463	520	Kahar		
362	428	210	990	8	12	933	60	5	342	613	45	23	790	183	14	412	574	Kayastha		
402	400	102	984	14	12	744	245	11	165	760	35	21	861	118	10	470	511	Kumhar		
273	339	138	970	10	12	600	310	12	212	701	37	20	820	134	14	451	533	Kurmi		
314	514	172	977	20	12	802	173	25	211	742	47	13	861	120	10	445	515	Lodha		
334	508	138	983	13	12	833	153	8	241	713	46	23	858	117	15	483	502	Lohar		
338	493	167	989	10	12	869	123	8	263	693	42	20	833	127	14	455	531	Nai		
310	533	146	991	9	1	764	230	0	231	722	32	13	866	116	11	511	478	Pathan		
313	470	103	973	11	10	897	93	8	399	589	32	30	841	109	21	491	488	Rajput		
313	470	200	990	8	2	889	103</													

SUBSIDIARY TABLE VI.

Proportion who are married and widowed at certain ages.

PROVINCE, PLACE OR AGENCY.	MARRIED PER 1,000 AGED 6-19 WHO ARE MARRIED.												WIDOWED PER 1,000 AGED 15-49 WHO ARE WIDOWED.											
	Males						Females						Males						Females					
	1921	1911	1901	1891	1881	1871	1921	1911	1901	1891	1881	1871	1921	1911	1901	1891	1881	1871	1921	1911	1901	1891	1881	1871
<i>Hindu.</i>																								
INDIA.	88	86	86	86	86	86	74	79	78	87	84	84	67	66	66	188	184	187	183	183	183	183	183	183
Ajmer-Merwara	80	83	80	80	80	80	43	47	72	46	62	62	60	64	60	176	180	180	180	180	180	180	180	180
Assam							56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Bengal							66	61	73	80	703	34	61	61	61	61	61	61	61	61	61	61	61	61
Bihar and Orissa	80	80	80	80	80	80	80	136	123	147			49	41	41	136	133	138	134	134	134	134	134	134
Bombay	80	80	80	80	80	80	100	83	113	183			80	46	63	80	47	136	117	117	117	117	117	117
Burma							6						84	83	86	83	86	83	86	83	86	83	86	83
C. P. and Dewar	51	49	50	52	51	50	50	54	50	130	50	50	61	50	42	184	78	123	123	123	123	123	123	123
Coorg	8						8						80	83	66	80	80	123	123	123	123	123	123	123
Madras							80	81	87	80	63	87	81	81	19	80	123	123	123	123	123	123	123	123
N. W. Province													61	61				80	100					
Delhi	18	12			11	20	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Punjab	18	12			11	20	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
United Provinces	31	30	32	33	32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Madras State	84	80	84	84	73	73	146	186	73	71	78	64	187	87	43	106	1	86	86	86	86	86	86	86
Central India (Agency)	38						77	86					84	84	83	131		86						
Orissa State	38						77	86					84	84	83	131		86						
Cochin State									12				34	30	36	12		124	123	1				
Hyderabad State	80	70	80	81	87	184	87	109	86	124	84	86	42	27	30			107	123	123	123	123	123	123
Kashmir State							8	14	86				84	83	80	86	86	80	86	83	184			
Mysore State								36	86	83	60	83	80	86	86	80	86	83	184					
Rajasthan (Agency)							48	86					86	86	83			147	186	186				
Tamil Nadu State									8				78	36		30		81	184	86	44			
<i>Muslim.</i>																								
INDIA.	9	16	9	9	80	80	80	80	80	80	42	80	34	30	30	80	84	80	80	80	80	80	80	80
Ajmer-Merwara	13	13			43	30	30	41	84	79			86	84	83	80	87	80	87	80	87	80	87	80
Assam					13	13				81	81	80	81	13	13	13	13	13	13	13	13	13	13	13
Bengal					86	87			78	86	73	21	83	87	100	13	80	86						
Bihar and Orissa	44	41	44	47	43	71	80	80	90	84	48	41	86	35	86	194	130	130	130	130	130	130	130	130
Bombay	50	46			50	53	80	58	80	80	80		80	80	80	80	80	80	80	80	80	80	80	80
Burma													87			80	87	74	87	80	80	80	80	80
C. P. and Dewar	18				10	24	27	80	27	27	48	40	39	37	23	39	34	329	80					
Coorg											6		31	23	23	13	80	1	80	123	123	123	123	123
Madras											36		23	13	17	11	119	19	194					
N. W. Province													35					68	56					
Delhi													37					80						
Punjab													37					80						
United Provinces													44					77	73	73	73	73	73	73
Madras State													80	87	142	74		86	86	78	80			
Central India (Agency)	82	82	82										64					100						
Orissa State	82	82	82										73					100						
Cochin State													83	81	81	14		100	97	93	84			
Hyderabad State	32	34	30	13	27	30	27	42	80				42	31	31		35	123	1	100	94			
Kashmir State													34	31				80						
Mysore State													83	80	14	21	30	80	100	100	100	100	100	100
Rajasthan (Agency)	19												86					86	74	13				
Tamil Nadu State													23	36	36	75		78	8	71				

NOTE.—The percentages for Provinces include those for the Indian States excepted in 1901, 1911, 1921, 1931, 1941, 1951, 1961, 1971, 1981, 1991, 2001, 2011, 2021, 2031, 2041, 2051, 2061, 2071, 2081, 2091, 2101, 2111, 2121, 2131, 2141, 2151, 2161, 2171, 2181, 2191, 2201, 2211, 2221, 2231, 2241, 2251, 2261, 2271, 2281, 2291, 2301, 2311, 2321, 2331, 2341, 2351, 2361, 2371, 2381, 2391, 2401, 2411, 2421, 2431, 2441, 2451, 2461, 2471, 2481, 2491, 2501, 2511, 2521, 2531, 2541, 2551, 2561, 2571, 2581, 2591, 2601, 2611, 2621, 2631, 2641, 2651, 2661, 2671, 2681, 2691, 2701, 2711, 2721, 2731, 2741, 2751, 2761, 2771, 2781, 2791, 2801, 2811, 2821, 2831, 2841, 2851, 2861, 2871, 2881, 2891, 2901, 2911, 2921, 2931, 2941, 2951, 2961, 2971, 2981, 2991, 3001, 3011, 3021, 3031, 3041, 3051, 3061, 3071, 3081, 3091, 3101, 3111, 3121, 3131, 3141, 3151, 3161, 3171, 3181, 3191, 3201, 3211, 3221, 3231, 3241, 3251, 3261, 3271, 3281, 3291, 3301, 3311, 3321, 3331, 3341, 3351, 3361, 3371, 3381, 3391, 3401, 3411, 3421, 3431, 3441, 3451, 3461, 3471, 3481, 3491, 3501, 3511, 3521, 3531, 3541, 3551, 3561, 3571, 3581, 3591, 3601, 3611, 3621, 3631, 3641, 3651, 3661, 3671, 3681, 3691, 3701, 3711, 3721, 3731, 3741, 3751, 3761, 3771, 3781, 3791, 3801, 3811, 3821, 3831, 3841, 3851, 3861, 3871, 3881, 3891, 3901, 3911, 3921, 3931, 3941, 3951, 3961, 3971, 3981, 3991, 4001, 4011, 4021, 4031, 4041, 4051, 4061, 4071, 4081, 4091, 4101, 4111, 4121, 4131, 4141, 4151, 4161, 4171, 4181, 4191, 4201, 4211, 4221, 4231, 4241, 4251, 4261, 4271, 4281, 4291, 4301, 4311, 4321, 4331, 4341, 4351, 4361, 4371, 4381, 4391, 4401, 4411, 4421, 4431, 4441, 4451, 4461, 4471, 4481, 4491, 4501, 4511, 4521, 4531, 4541, 4551, 4561, 4571, 4581, 4591, 4601, 4611, 4621, 4631, 4641, 4651, 4661, 4671, 4681, 4691, 4701, 4711, 4721, 4731, 4741, 4751, 4761, 4771, 4781, 4791, 4801, 4811, 4821, 4831, 4841, 4851, 4861, 4871, 4881, 4891, 4901, 4911, 4921, 4931, 4941, 4951, 4961, 4971, 4981, 4991, 5001, 5011, 5021, 5031, 5041, 5051, 5061, 5071, 5081, 5091, 5101, 5111, 5121, 5131, 5141, 5151, 5161, 5171, 5181, 5191, 5201, 5211, 5221, 5231, 5241, 5251, 5261, 5271, 5281, 5291, 5301, 5311, 5321, 5331, 5341, 5351, 5361, 5371, 5381, 5391, 5401, 5411, 5421, 5431, 5441, 5451, 5461, 5471, 5481, 5491, 5501, 5511, 5521, 5531, 5541, 5551, 5561, 5571, 5581, 5591, 5601, 5611, 5621, 5631, 5641, 5651, 5661, 5671, 5681, 5691, 5701, 5711, 5721, 5731, 5741, 5751, 5761, 5771, 5781, 5791, 5801, 5811, 5821, 5831, 5841, 5851, 5861, 5871, 5881, 5891, 5901, 5911, 5921, 5931, 5941, 5951, 5961, 5971, 5981, 5991, 6001, 6011, 6021, 6031, 6041, 6051, 6061, 6071, 6081, 6091, 6101, 6111, 6121, 6131, 6141, 6151, 6161, 6171, 6181, 6191, 6201, 6211, 6221, 6231, 6241, 6251, 6261, 6271, 6281, 6291, 6301, 6311, 6321, 6331, 6341, 6351, 6361, 6371, 6381, 6391, 6401, 6411, 6421, 6431, 6441, 6451, 6461, 6471, 6481, 6491, 6501, 6511, 6521, 6531, 6541, 6551, 6561, 6571, 6581, 6591, 6601, 6611, 6621, 6631, 6641, 6651, 6661, 6671, 6681, 6691, 6701, 6711, 6721, 6731, 6741, 6751, 6761, 6771, 6781, 6791, 6801, 6811, 6821, 6831, 6841, 6851, 6861, 6871, 6881, 6891, 6901, 6911, 6921, 6931, 6941, 6951, 6961, 6971, 6981, 6991, 7001, 7011, 7021, 7031, 7041, 7051, 7061, 7071, 7081, 7091, 7101, 7111, 7121, 7131, 7141, 7151, 7161, 7171, 7181, 7191, 7201, 7211, 7221, 7231, 7241, 7251, 7261, 7271, 7281, 7291, 7301, 7311, 7321, 7331, 7341, 7351, 7361, 7371, 7381, 7391, 7401, 7411, 7421, 7431, 7441, 7451, 7461, 7471, 7481, 7491, 7501, 7511, 7521, 7531, 7541, 7551, 7561, 7571, 7581, 7591, 7601, 7611, 7621, 7631, 7641, 7651, 7661, 7671, 7681, 7691, 7701, 7711, 7721, 7731, 7741, 7751, 7761, 7771, 7781, 7791, 7801, 7811, 7821, 7831, 7841, 7851, 7861, 7871, 7881, 7891, 7901, 7911, 7921, 7931, 7941, 7951, 7961, 7971, 7981, 7991, 8001, 8011, 8021, 8031, 8041, 8051, 8061, 8071, 8081, 8091, 8101, 8111, 8121, 8131, 8141, 8151, 8161, 8171, 8181, 8191, 8201, 8211, 8221, 8231, 8241, 8251, 8261, 8271, 8281, 8291, 8301, 8311, 8321, 8331, 8341, 8351, 8361, 8371, 8381, 8391, 8401, 8411,

CHAPTER VIII.

Literacy.

139 In previous census reports this chapter has usually been headed "Education", a title which might comprehend any range of literary ability from the scrawl of a signature on a cheque to the composition of a political leading article. The census statistics, however, are in fact of a more modest nature, being confined to a record of those who can read and write. Even so, to understand the meaning and significance of the returns, it will be necessary to consider the criteria which have been held at this and previous censuses to justify the return of an individual as literate. Before 1901 the population was divided in respect of this return into three categories—*learning*, *i.e.*, under instruction either at home or at school or at college, *literate*, *i.e.*, able both to read and write some language but not at the moment under instruction, and *illiterate*, *i.e.*, not under instruction and not able to read and write any language. The classification was found, however, to be unsatisfactory and misleading. The group of those recorded as *learning* was depleted by the omission, at the one end, of the younger pupils who had recently joined the schools and, at the other, of the more advanced students who claimed to be literate, and consequently the number of persons recorded as under instruction differed substantially from the corresponding statistics of the Education Department. This triple classification was therefore abandoned in 1901 and the population was divided into the two classes of *literate* and *illiterate*. No orders were, however, issued as to the degree of proficiency in reading and writing required to satisfy the test of literacy, and the decision being left in the hands of the local staff considerable variations naturally resulted. A clear definition was first adopted in 1911, when it was laid down that those only were to be considered literate who could write a letter to a friend and read the answer to it. This definition has been retained at the present census and the returns are therefore directly comparable with those of 1911.

It is not easy to compute the degree of accuracy which the statistics represent. There are a considerable number of persons who can read but not write, chiefly Muhammadans who have learnt enough Arabic to be able to read the Koran. This class has some pretensions to literacy and has been separately recorded in the Baroda schedule. It does not, however, qualify under the definition laid down. So far as the human equation is concerned ambition on the part of the public to be recorded as literate was probably met by exclusiveness on the part of the educated enumerator, who had the last word in the matter. In the North-West Frontier Province, where the sword is more respected than the pen, there is said to have been some reluctance on the part of the tribesmen to confess to so unmanly a quality as literacy, while there seems in various provinces to have been an inclination for the census staff to interpret the simple and practical census criterion in the less elastic terms of a school standard, and to allow literacy only to those who had passed the fourth primary course. As will be seen later on difficulties appear in the analysis of figures of literacy by age which perhaps suggest some inconsistency of record, but on the whole there is a consensus of opinion that the simple criterion laid down was easily understood and sensibly interpreted. No question was prescribed as to the language of literacy, as enquiry on this point made in 1901 had shown that each person was almost invariably returned as literate in his mother tongue. In Baluchistan, Baroda, Kashmir and Mysore however, further information on these lines was obtained and tabulated.

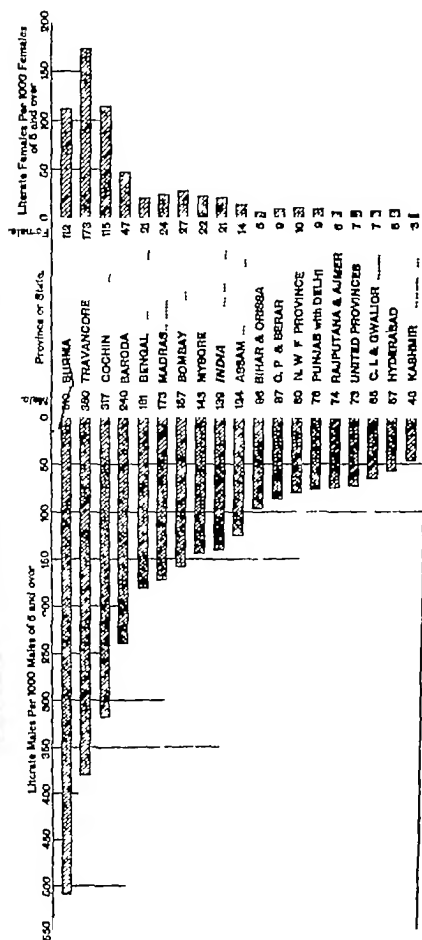
140 The statistics regarding Literacy are contained in Imperial Tables VIII and IX. Table VIII shows the number of literate and illiterate persons of each sex and religion classified under the age-periods 0-10, 10-15, 15-20 and 20 and over, and Table IX their distribution by selected castes. In both tables figures are given for persons literate in English. It must be explained that a change has been made in the mode of presenting the proportional figures given in the tables in this chapter. Hitherto it has been the practice to base the ratio of the literate on the total of the population of the area or community dealt with. It is, however,

The scope of the return.

Reference to statistics

Diagram showing literacy by sex and locality 1921

DIAGRAM SHOWING LITERACY BY SEX & LOCALITY 1921

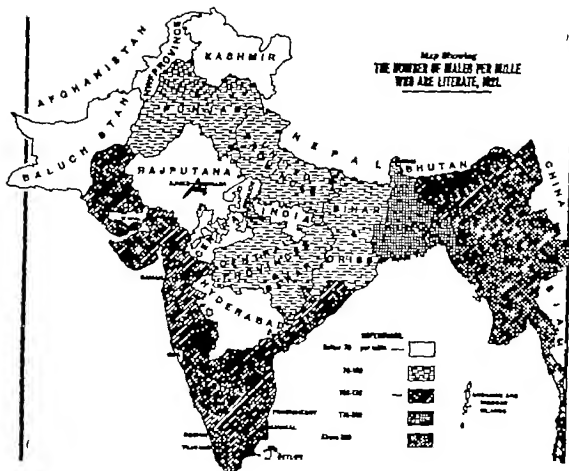


now usual in the reports of European countries and of America to presume that children below a certain age are illiterate and to exclude them from the population on which the proportions are calculated. In the present case it is assumed that the population below five years old is illiterate and the age-group 0-5 has, therefore, been excluded in working out the ratios of the literate in the population. It has been suggested that the change brings the figures under the influence of the discrepancies to which, as has been seen in Chapter V, the record of age is subject, but the minimum age chosen (under five) is sufficiently low to afford a fair margin before literacy is usually reached and, in any case, the errors in age grouping are probably fairly constant from census to census in the population and its different sections so that statistical comparisons are not vitiated thereby.

141 The main figures of literacy by age and locality are given in the state-ment below. The diagram opposite illustrates the regional figures in each sex.

PROVINCE STATE OR AGENCY	NUMBER PER MILLE WHO ARE LITERATE										
	ALL AGES 5 AND OVER.			5-10.		10-15		15-20		20 AND OVER.	
	Persons.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
India	82	139	21	29	10	110	23	174	36	171	20
Assam	72	124	14	35	8	110	21	164	23	160	13
Baluchistan	47	76	7	104	76	289	187	801	217	346	166
Baroda	147	240	47	43	50	280	99	354	105	285	34
Bengal	104	181	21	45	11	144	29	214	28	225	21
Bihar and Orissa	61	98	0	18	3	70	8	111	10	126	7
Bombay	95	157	27	42	15	146	42	217	53	184	24
Burma	317	510	112	98	45	373	116	669	156	620	118
Central India and Gwalior	37	65	7	14	4	51	8	78	11	82	7
Central Provinces and Berar	40	87	9	17	5	80	12	142	18	104	9
Cochin	214	317	115	69	45	251	150	359	174	397	113
Hyderabad	33	57	8	16	5	46	10	80	14	67	8
Kashmir	26	46	3	7	1	28	3	53	4	61	3
Madras	98	173	24	35	12	129	33	204	44	214	22
Mysore	84	143	22	35	12	128	36	174	43	169	19
N. W. F. Province	50	80	10	11	3	47	11	114	20	102	11
Punjab with Delhi	46	76	9	6	3	54	12	98	17	97	10
Rajputana and Ajmer	42	74	0	10	2	49	5	86	9	97	6
Travancore	279	380	173	135	148	357	210	437	226	440	160
United Provinces	42	78	7	14	3	62	9	92	12	89	7

The number of persons recorded in the present census in India as literate, in the sense of being able to write a letter and read the reply thereto, is 22.6 millions, amounting, if children under five years of age be excluded, to 82 in every thousand of the population. Of males 139 in every thousand at age five and above are literate, the corresponding proportion in the case of females being 21. Taking males we find that in the ages 5-10, 29 per mille only are literate, the proportion rises to 110 between the ages 10 and 15 and to 174 between 15 and 20 and thereafter drops to 171. The age-group 15-20 is usually considered to be the most representative period in considering the extent of literacy in the population. By fifteen schoolboys have generally passed the fourth primary standard and can therefore read and write without question, while presumably few who have not learnt to read and write by the age of 20 will acquire that faculty in after life. At the same time it may be argued that the literacy of boys and girls at school is only of potential importance and that effective literacy begins at about 20 years of age. At any rate this drop in the proportion at 20 and over is at variance with the experience of previous censuses, when the proportion of literate males older than 20 far exceeded the proportion between 15 and 20. The point will be discussed later on when we have more fully reviewed the statistics for localities and communities. Meanwhile we may note that the proportion among literate females also is highest (36 per mille) at the age 15-20 and falls to 20 per mille at 20 and over. Apart from Burma, where monastic education is traditional and more than half of the population over five years old is literate, we notice in the map below the high standard of literacy round the coastal tracts of eastern, southern and western India, as compared with the mass of illiteracy in the purely agricultural population of the northern and central portions of the country. We can recognize various influences in this distribution—economic, political, social, religious and even racial. Literacy will always be high in commercial and industrial tracts and in the large cities round which they lie. The growth in Bengal of the middle class, with its exclusively clerical traditions, is the result partly of the system of land tenure in the regularly settled tracts and partly of the political history of eastern India, where conditions have for long been more settled and peaceful than in other parts of India.



The proportion of literacy varies considerably within the boundaries of the provinces. Thus in Assam the ratio per mille is 83 in the Surma Valley and 70 in the Brahmaputra Valley. In Bengal the central portion which contains the metropolis is the most literate having 143 literate persons in every thousand, the western division has 127 literates while the east and the north, with 91 and 76 respectively are much more backward. Orissa again has a ratio of 79 per mille. South Bihar has 66, and North Bihar only 45. In the Bombay Presidency the proportion of literates varies from 150 in Gujarat to 62 in Sind. Literacy is naturally more prevalent in South Burma which is more highly developed than the northern tracts. Literate males are most numerous in the central division and literate females in the Delta and in several districts in Burma more than half the population is literate. The Nerbudda Valley which contains many good sized towns has the largest proportion of literate males (131 per mille) in the Central Provinces and the Chota Nagpur States the smallest (18 per mille). In Madras the West Coast is the most advanced having 119 literates per thousand, the Agency division being the most backward. The Sub-Himalayan tract in the Punjab which contains ten cantonments and a large number of troops has a proportion of 51 literates per mille while the North West Dry Area where there is only one cantonment has 37 only. In the United Provinces all the natural divisions except the Sub-Himalayan East which is stationary have progressed fairly uniformly though the standard is not high, the best educated part of the province being the West Himalayan districts with a proportion of 143 males and 14 females literate in a thousand. The strength of the Christian Church with its wide educational organisation, has done much to raise the standard of literacy in south India, especially in the states of Cochin and Travancore where, as also in Mysore the progress is also due to the energy of the administrations in furthering educational advancement, a very high proportion of the higher castes in these states being now literate.

142 The table below shows the progress of literacy in the population of the Progress of Literacy main provinces since 1911

PROVINCE, STATE OR AGENCY	NUMBER OF LITERATE PER MILE AT CERTAIN AGE PERIODS											
	ALL AGES 10 AND OVER.				15-20				20 AND OVER.			
	Males		Females		Males		Females		Males.		Females.	
	1921	1911	1921	1911	1921	1911	1921	1911	1921	1911	1921	1911.
1	2	3	4	5	6	7	8	9	10	11	12	13
India	161	140	23	13	174	144	36	21	171	150	20	12
Assam	144	117	15	8	164	126	23	12	150	121	18	7
Baluchistan	70	56	0	4	301	287	217	164	346	376	166	162
Baroda	277	229	52	25	354	253	105	40	264	216	34	16
Bengal	210	167	23	15	214	180	28	10	225	199	21	13
Bihar and Orissa	114	104	7	6	111	103	10	7	126	114	7	4
Bombay	181	153	30	17	217	171	63	28	184	163	24	15
Burma	576	406	123	70	560	479	156	109	620	544	118	75
Central India and Gwalior	76	64	7	3	78	61	11	6	82	69	7	3
Central Provinces and Berar	103	87	10	4	142	109	18	8	104	87	0	3
Cochin	365	320	127	79	359	303	174	104	397	307	113	73
Hyderabad	65	67	0	5	86	69	14	7	67	72	8	4
Kashmir	54	53	3	2	53	42	4	2	61	62	3	2
Madras	199	183	29	17	204	184	44	20	214	196	22	14
Mysore	183	142	24	15	174	137	43	24	169	152	10	13
North-West Frontier Province	65	81	12	8	114	82	40	12	102	91	11	8
Punjab with Delhi	60	84	11	8	95	78	17	12	102	95	10	7
Rajputana and Ajmer	89	84	6	4	66	74	0	5	94	91	0	4
Travancore	425	320	178	64	437	318	226	97	440	360	160	56
United Provinces	85	73	8	0	92	83	12	0	89	82	7	0

The number of literate persons in India has risen during the decade from 185 to 226 millions, or 22 per cent against an increase in the population of 12 per cent. If persons under ten years are excluded the increase of literate males is 16 and that of literate females is 71 per cent. The improvement which, as will be seen from the table, results in raising the proportion of literate males from 140 in 1911 to 161 in 1921 in the population and of literate females from 13 to 23, is shared by every province and state though in varying degrees. It is remarkable in Burma where a large proportion of the Buddhist population passes through the monastic schools. The standard of education in these schools is however of an elementary character, and it is probable that, had any higher educational test been applied, Burma would have held a far lower position in comparison with other provinces than that which it now occupies. Of the other British Provinces, Assam, Bengal and Bombay are the only three where there has been a marked improvement in the proportion of literate males since 1911, while in foreign territory the high progress made in the enterprising states of Baroda, Travancore, Cochin and Mysore is conspicuous. In Baroda compulsory education has been enforced since the year 1906, and the discussion in the Bombay and Baroda reports regarding the effect of the measure on the statistics of literacy, as compared with those of Kathiawar and British Gujarat, will interest students of educational policy. The Baroda State has not yet caught up the lead which British Gujarat had over it in 1901, though in the proportion of literates in the school-going ages 10 to 20 the State is now ahead. It is difficult to gauge the effect of the influenza mortality on the comparative statistics of literacy, but the incidence of the death-rate must undoubtedly have been heavier in the illiterate rural population than among literates, and the high percentage of increase in literacy in the Central Provinces must owe something to this selective factor. On the other hand Mr Edye, writing of the progress in the United Provinces, remarks "The advance (since 1911) would certainly have been greater had not the influenza epidemic discriminated so markedly against persons between 20 and 35 years of age, figures have not been abstracted for this age-period, but it must certainly contain a greater proportion of literates than any other of equal length. But it would be dangerous to attribute the want of educational progress to the influenza epidemic as a whole. Literates are concentrated in the well-to-do classes and these cannot but have resisted the disease better than did the poor." In Assam, where the total population increased by over 13 per cent, the high rate of progress has been well distributed over the province and literacy, especially in the Hill tracts, owes much to missionary enterprise, while in the tracts of North-Western India the concentration of military forces is probably the chief factor in determining the trend of the figures.

143 Though the number of literate women throughout India is still small and their proportion very low among the more backward peoples of the Central Provinces, Bihar and Orissa, Rajputana, Kashmir and Hyderabad, the fact remains that

Literacy among females.

there has been steady advance in the education of girls in the last twenty years. Literacy is an indication rather of culture than of civilisation, and while there is nothing inherent in the Indian tradition that should prevent the development of the education of the male population, the case is, except in Burma, different in regard to women. The spirit both of Brahmanism and of Islam is distinctly opposed to the education of the female sex and there is little doubt that the women of India owe the growing facilities offered them for acquiring literacy to the influence on the male section of the community of foreign standards and ideals. That the education of women is unnecessary unorthodox and dangerous, is still the standpoint of a large section of Indian society. It is still the predominant attitude of the Muhammadans and Jains of the better class, though in the case of their men the ability to read and write is for the former a religious obligation and for the latter a professional necessity. The scheme of life which orthodox tradition imposes on the women of India presents obstacles to education which if not insuperable, are at least formidable. The customs of *purdah* and of early marriage limit the number of girls in the schools and necessitate the withdrawal of the

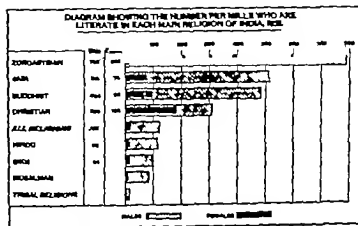
Provinces.	Variation per cent of female females aged 15 and over in the decade.		Actual number of females recorded in 1921.
	1901-1911	1911-1921	
India	63	71	2,792,218
Assam	56	130	46,008
Bamda	173	119	41,360
Bengal	87	86	497,521
Bihar and Orissa	64	66	108,235
Bombay	61	73	300,822
Burma	—	—	612,708
C. I. and Orissa	10	110	25,302
C. P. and Berar	45	114	82,304
Cochin	51	75	49,320
Hyderabad	23	73	43,340
Kashmir	27	131	4,007
Madras	59	68	458,906
Mysore	58	61	87,023
N. W. F. Provinces	24	81	8,987
Punjab and Delh.	58	49	82,715
Rajputana & Ajmer	83	48	25,865
Tamilnad	80	224	294,007
United Provinces	80	19	124,604

majority before they have had a fair opportunity to acquire any lasting knowledge of letters, while the orthodox attitude of society towards women who accept any public position accentuates the difficulty of obtaining the necessary supply of professional teachers. It is only or at least chiefly when the general advance of male culture has reached well beyond the stage of mere vernacular literacy that the atmosphere becomes favourable to real progress in the instruction of women and if the extent and progress of literacy among females usually follows closely the statistics for males it is because the higher cultural advance of the latter which causes the improvement of the condition of women, is built up on the basis of elementary literacy. The percentages in the margin give some indication of the results of local effort in female education, but are dangerous to use without reference to the

absolute figures which are therefore given against them.

Literacy by Religion.

144. The statistics of literacy by religion are exhibited in the annexed diagram



NOTE.—The proportions in this diagram are for all ages.

more decided increase among literate females. The proportion of Buddhist males who are literate is slightly below that of the Jains, but their women are considerably more advanced. Of the Christians 235 per mille are literate, but in their case the sex inequality is much smaller the proportion of literate females being more than half that of males.

and, in more local detail, in subsidiary Tables I and III at the end of this chapter. Almost all the Parsis and most of the Jains are traders for whom literacy is essential for business. Of the latter more than half of the males are able to read and write but only 9 per cent of the females but while Jain male literates have risen slightly there is a

The Hindus have one literate person in every thirteen, for males the ratio is one in eight and for females one in sixty-three, the proportion for males having increased in the decade from 116 to 130 per mille and that for females from 9 to 16. The proportion of Sikh males who are literate is less than that of Hindus. Literacy is valued by the Sikhs for the religious exercise of reading the *Granth* and is said to be easy to attain, as the Gurmukhi script is not difficult to master. But the Sikhs are heavily recruited from the lower illiterate classes and this fact accounts both for their low standard of literacy and for the decline from 121 to 107 per 1,000 in the last decade. The Census Superintendent of the Punjab writes —

“The educational stagnation of the Sikhs is possibly due to a real increase in literacy combined with a diminution arising from the conversion of the comparatively illiterate Mazhabis to the ranks of Sikhism. Another factor in the situation is possibly the fact that a knowledge of Gurmukhi is not a key to any Government appointment in the same way as the Urdu language is, and this may to some extent explain the growing neglect of the national language of the Sikhs.”

One Muhammadan male in 11 and one female in 116 can read and write. The low position of Musalmans is partly due to the fact that in Bengal, the Punjab, North-West Frontier Province and Sind, where they predominate, they are mostly agricultural. Where they are in the minority, as in the Central Provinces, United Provinces and Madras, they are usually town dwellers and have a considerably higher proportion of literates. The Hindu community embraces every stratum of society and the proportion of literacy among Hindus is seriously affected by the inclusion among them of the vast mass of the lower rural classes. It will be found later on that some of the higher Hindu castes have more literate males than the Parsis, while others are on a level with or even below the aboriginal tribes.

145 The procedure observed in compiling Imperial Table IX, showing literacy by caste, was to select a sufficient number of caste groups to give an idea of the progress of education in the various strata of society. The main statistics of this table have been reduced to proportional figures for some of the main castes in subsidiary Table VI, at the end of this chapter. The castes are arranged there in order of merit in literacy and though, speaking generally, literacy is connected with social position, occupation is a strong modifying influence so that, for example, the professional and trading classes to whom literacy is essential not unfrequently stand higher than castes above them in the social scale. The low position of the Rajputs exemplifies this point. The extent of literacy of individual castes varies in provinces and states, and it is sometimes the case that high castes in one area are less advanced in respect of literacy than castes of far lower rank elsewhere. Thus in both Assam and Bengal the Baidyas are ahead of the other castes in literates both male and female, more than half of the Baidya women in Assam being able to read and write. In most provinces the Brahmans have a high proportion of literate males, though in the Punjab and N-W F Province the Khatri and Aroras lead and in the United Provinces the Kayasthas (523) and Agarwals (398) are far ahead of the Brahmans (191). In Madras there are marked variations in the various sub-castes of Brahmans, the Tamil Brahmans having the largest proportion (715) of literate males and the Malayalam (219) of literate females. Among Muhammadans the Bohras in Bombay and the Labbais and Mappillas in Madras have a comparatively high degree of literacy and in the United Provinces the Saiyids are even more literate than the Brahmans. Literacy among the “depressed classes” and aborigines is naturally rare. The comparatively high proportion of literates among Santal women in Bihar and Orissa is remarkable, but something of the same sort is seen among some of the tribes of the Central Provinces who send their girls freely to the mission schools. It is unnecessary further to recite figures which are shown more clearly in tabular form, and as the local variations are considerable the subject is best studied by reference to the provincial reports.

146 In the whole of India 25 million persons or 160 males and 18 females in every ten thousand persons of each sex, aged five and over can read and write English. One in thirty males in Bengal and one in forty-three in Bombay are literate in English. In Madras, Assam and Burma the proportion is 2 per cent, while in Bihar and Orissa, the Central Provinces and the United

Provinces it is below 1 per cent. Of the States Cochin and Travancore have between 3 and 4 per cent. but in others the proportions are much lower. More than half the number of Parsi males and one-fourth of their females can read and write English. Of Christians nearly all the Europeans and many of the Anglo-Indians are literate in English but except on the southern coast English literacy is rare among the Indian Christians and the regional proportions therefore largely follow the racial distribution. Though the proportions in the other communities, taken on the total populations, are small, some of the higher castes have a fairly large number of English knowing members. In Bengal about half of the Baidya males and a quarter of the Brahman and Kayastha males are literate in English while in Madras more than a quarter of the Tamil Brahmins can claim this accomplishment. Of the Jains in Kathiawar nearly a tenth are literate in English though the Chaturth Jains of Kolhapur who are cultivators are less literate than the average of the Presidency. That substantial progress has been made since last census in the acquisition of English is suggested by the fact that during the decade the number of males knowing English rose by 51 per cent. and that of females by 57 per cent. but the figures are too small for percentages of this sort to be anything but misleading, and the variation in the proportions shown in subsidiary Table IV or in the actual figures is a safer guide. Among the main Provinces the greatest progress has been made by Bengal Assam and Bombay and in the States by Cochin, Travancore, Mysore and Baroda.

Literacy in Cities.

147 The proportion of literates in urban is naturally much higher than in rural areas. The statement in the margin exhibits the advantage which the inhabitants of large towns possess as regards literacy over those of rural tracts. The proportion of literate males is three times and that of literate females six times as great in cities as it is in the general population. The reasons for this difference are obvious. Life in cities is clearly more conducive to the diffusion of literacy than life in the villages. The cities are the centres of social, intellectual and commercial life. They contain the principal law courts and some of them are the headquarters of Government. They are better provided than the villages with schools and they contain most of the higher educational institutions, at which persons who have already acquired the census standard of literacy in other districts come to pursue their studies. Of the three Presidency towns Calcutta has 53 per cent. literate males and 27 per cent. females, Madras 50 and 19 and Bombay 31 and 16 per cent. respectively. The eight cities and selected towns of the Punjab contain 212 literate males and 62 females in every thousand of either sex as compared with 74 and 9 in the Province as a whole.

Province, State or Agency	Number of literate persons per 1,000 of each sex (all ages 5 and over).			
	Total Population.		Cities.	
	Males.	Females.	Males.	Females.
India	189	21	572	199
Bengal	161	21	496	211
Bihar and Orissa	96	6	339	82
Bombay	127	27	323	126
Burma	810	113	858	370
C. I. and Berar	67	9	324	84
Madras	173	24	823	171
Punjab	74	9	223	62
United Provinces	73	7	240	62
Hyderabad State	27	8	223	85
Kathiawar State	44	3	174	7
Mysore Pr. &c.	143	24	440	160
Rajputana (Agency)	66	8	223	23

Acquisition and Retention of Literacy

148. Of the attitude of the average Indian public towards literary education the Census Superintendent of Mysore himself an Indian, writes —

What determines literacy in any community is in the first instance the nature of the occupations it usually follows that is, whether they are such as require knowledge of reading and writing, and in the second instance whether there are any special facilities within reach which attract the members of the community to learn though there be a great need for it learning. The pursuit of letters purely as means for intellectual growth is mostly a sign of the theocrats.

Mr Thyagarajayar proceeds to trace the dominant influence on education of utility based on occupation and sometimes modified a in the Christian community and to a certain extent in towns, by opportunity through the various social and communal sections of the population. The discussion at least emphasises the fact that unlike the more advanced centres of Europe where ignorance of letters hides its head there is in India as yet no general tradition of literacy. Mr Edye (United Provinces) remarks —

"Every district officer knows that boys who will leave these (primary) schools before they have learnt to read and write form a big proportion of the total attendance. The parents of such a boy never seriously intend that he should be educated. They send him to school and leave him there so long as he is in the preparatory or even in the lower classes, because this is a cheap way of keeping him occupied and out of mischief, because they are pressed to do so by the schoolmaster—or even by his superiors—who want to improve the look of their returns, or perhaps in case he shows a special aptitude for learning. They take him away as soon as the expense increases and he can make himself useful in field or at pasture. This attitude is natural enough. What has been emphasised in the last two reports is still true of the villager, if not of the townsman. He does not desire education for his children for its own sake, but only as a means of obtaining employment. There is thus no motive for educating the boy who is destined for the plough."

This attitude towards education is perhaps changing in the more advanced areas, but that it is widespread will be admitted by every student of rural mentality in India. The question then how far literacy, imposed on an indifferent if not unwilling people, is retained when no longer needed is one of some interest, and the subject has been studied in various provincial reports on the basis of such figures as are available of the age classification of literate persons at successive censuses. We have already seen that the percentage of literate males rises continuously from 29 in the age-period 5-10 to 110 in the group 10-15 and 174 in the group 15-20. So far the progression of the figures is according to expectation and follows the sequence shown in previous enumerations. In the ages of 20 and above there is, however, considerable variation. At the Census of 1911 the number per mille of literates in the ages 20 and over substantially exceeded the proportion in the group 15-20 (150 against 144). Commenting on this somewhat unexpected rise Sir Edward Gait remarked—

"The steady rise in the proportion up to the age-period 15-20 is readily intelligible, but it is not so clear why there should be a further rise amongst persons aged 20 and over. It will be seen further on that education is steadily spreading, and it would seem, therefore, *a priori* that the proportion who are literate between the ages of 15 and 20, *i.e.*, amongst persons who have just passed the ordinary school-going age, should be larger than that amongst older persons, many of whom passed the school-going age at a time when the opportunities for learning were far smaller than they are now. Three reasons may be adduced to account for this apparent anomaly. The first is that, even at the age of 15, a boy's education is sometimes not sufficiently complete to qualify him to be classed as literate in the sense of being able to write a letter and to read manuscript. The second is that, in the case of youths, the enumerators were perhaps apt to be stricter than at the higher ages, when they would more readily accept an affirmative answer to the question "Can you both read and write?" Thirdly amongst the trading classes, who generally have a large proportion of literate persons, the knowledge is picked up gradually in the course of business and a youth may often be 20 years of age or even older before he is fully competent to read and write."

At the present census the proportion of those of 20 and above drops to 171 but the decrease is not by any means shared by all provinces and communities as will be seen by the figures in the statement below,

Units having a larger proportion of literate males over 20 than between 15 and 20

15—20 Over 20

Units having a smaller proportion of literate males over 20 than between 15 and 20

15—20 Over 20

Provinces

Bengal	214	225
Bihar & Orissa	111	126
Burma	569	620
Madras	204	214
Central India	78	81
Cochin	359	397
Gwalior	78	83
Kashmir	53	61
Rajputana	80	90
Travancore	437	440

Assam	164	150
Bombay	217	184
C. P. & Berar	142	104
N. W. F. Province	114	102
Punjab	96	94
United Provinces	92	89
Baroda	354	265
Hyderabad	86	67
Mysore	174	169

Religions

Sikh	128	135
Buddhist	616	692
Parsi	880	918
Muhammadan	113	122
Tribal Religions	21	22

Hindu	164	158
Jain	682	660
Christian	422	415

Even if we presume that the three factors described above have not been sufficiently influential to override the natural trend of the figures the difficulty in explaining the local and communal variations is not overcome

Comparison with age-groups of previous census.

149 Further difficulties appear when we attempt any comparison between the numbers who were literate in the age-groups 10-20 in 1911 with those returned as literate who are 20 and over at this census and must therefore include the survivors of the former group. This comparison has been the subject of study in various provinces. In Bengal Mr Thompson to obtain greater accuracy graduated the literates returned in each of the ages from 10 to 29 so as to eliminate, as far as possible, the vagaries of the age returns. He writes —

The apparent conclusion is that the proportion literate steadily increases from the age of 10 right up to the age of 27. It is possible that mortality is greater among the illiterate than among the literate and that a certain number teach themselves to read after they have reached maturity but the result is an unexpected one and must, I think, be taken as pointing to the conclusion that whether there has been lapse from literacy to any great extent or not, it has not been admitted in filling up the census schedules."

Mr Lloyd (Assam) arrives at much the same conclusion. He compares the actual figures of literates returned in age-group 20-30 in the two districts of Kamrup and Cachar with the literates returned in the age-group 10-20 in 1911 and finds a very large excess in the former group in each district. The results of similar calculations in the figures of Madras, Bihar and Orissa, Travancore and Baroda are much the same and all that we are in a position to say is that if there is, as may be expected on general considerations, any lapse from literacy in the higher age-periods at any rate it does not appear in the census statistics.

Comparison with the returns of Education Department.

150 It will be of interest to compare the progress of instruction according to the

Kind of Institution	FIGURES IN INDIAN FIGURES		Percent age increase + or decrease	FIGURES IN SCOTLAND		Percent age increase + or decrease
	1911.	1912.		1911.	1912.	
Total	129,898	208,003	+58	2,561,938	3,218,809	+25
Art Colleges	144	184	+27	2,566	66,721	+25
Professional Colleges	46	66	+43	2,297	72,862	+22
Secondary Schools	5,415	8,271	+52	208,951	327,858	+56
Primary Schools	118,413	186,782	+58	4,3,666	6,896,428	+58
Training and other special schools	2,703	2,916	+8	64,541	198,798	+30
Private Institutions	50,491	27,829	-45	693,690	167,573	-76

statistics issued by the Education Department. The comparative figures of the numbers of institutions and scholars in the last year of each of the two decades are shown in the marginal statement. The total number of scholars is now 8·3 millions, the

proportion of female scholars being barely one-fifth of that of the male. In every hundred scholars 63 are Hindus, 24 Mussalmans, 4 Christians and 9 others. Of the 63 Hindus, again, 11 are Brahmans and the rest non Brahmans, while of the latter 6 per cent. belong to the depressed classes."

Provinces.	Number of total scholars per 1000 of the population (British of India)	Number of Hindus per 1000 of the population (British of India)	
		1911.	1912.
1	2	3	4
Bombay	64	66	43
Madras	60	66	44
United Provinces	43	103	34
Bihar and Orissa	46	87	35
Bengal	23	87	36
C. and Berar	23	86	36
Madhya Pradesh	21	71	37
P. W. Frontier	27	7	23
United Provinces	22	43	23

The majority of the pupils, viz. 76 per cent., are in the primary schools and of these nearly half were at the most rudimentary stage. Only a limited number of these primary students proceed further with their studies and of the remainder probably the greater portion relapses into illiteracy after leaving school. The shortness of time passed at school by the average pupil who enters a primary institution, the imperfect nature of the instruction and the irregularity of the attendance undoubtedly account for the fact that the figures of literacy are less than would be expected from the figures of school attendance. The comparative figures of literates (census)

and pupils (departmental) are given in the marginal table. Except in Burma where conditions are exceptional, there is some resemblance between the proportions in columns 2 and 4 the latter column representing roughly the student age. It has to be remembered that the figures in column 2 exclude those who are studying in their homes or in indigenous institutions outside the jurisdiction of Government. If however the figures in columns 2 and 4 represented the outturn at the age of 20 of youths who had a fair knowledge of reading and writing the proportions in column 3 should clearly be considerably higher than

they are. The subject has been dealt with in some of the provincial reports in greater statistical detail. Mr. Jacob (Punjab) points out that literacy among boys and girls at school is only of potential importance and that "effective literacy" begins at about 20 years of age. Judged from this point of view there has been practically no progress in the Punjab during the decade. After collating the statistics of the educational department with those of the census Mr. Jacob observes —

<i>Literates over 20 for the Punjab and Delhi</i>					
	1911	1921			
Punjab	67,177	670,000			
Delhi		7,687			
Total	67,177	707,687			
<i>Total males over 20 for the Punjab and Delhi</i>					
	1911	1921			
Punjab	7,078,790	7,144,121			
Delhi		161,005			
Total	7,078,790	7,305,126			

Basing his calculation on the number of males who enter on their twentieth year every year and the proportion of literates among them according to the census Mr. Jacob estimates that 22,000 literate males of the age of twenty will have to be turned out to maintain the present standard of 9.7 per cent. literates over that age, while in order to work up and maintain a standard of 20 per cent. literate males it would be necessary for the Education Department to turn out 15,000 literate males every year. The actual outturn is 17,000 at present and the Department hopes to increase it to 60,000 during the next decade. But considerable allowance has to be made for lapse from literacy which is common among boys even after four years of schooling. Assuming a lapse of 10,000 per annum, leaving 50,000 stable literate males Mr. Jacob calculates that the number of literate males in 1931 would be 814,808 giving, with a rise of 5.5 in the total population in the decade, a percentage of 13.2 of literate males as compared with 9.7 at present.

Mr. Edye (United Provinces) uses the departmental figures of expenditure on primary schools to calculate roughly the cost of producing a literate. He writes —

"The census statistics are not concerned with degrees of education, but only with mere literacy which is, generally speaking, the product of the primary schools. Literates of the age-period 10-20 found in 1921 represent roughly the effective output of the primary schools for the decade. These amount to 111,000. Direct expenditure incurred on primary education during the same period was about two and a half crores. The expenditure of the previous decade cannot have been much more than one and a half crores: the figure for 1901-02 was Rs. 11,16,000, and for 1910-11, Rs. 17,75,000. Literates of the age-period 10-20 numbered 389,000 in 1911. In the decade 1901-11 the cost of production of a literate was therefore Rs. 10. In the present decade the corresponding cost of production has been Rs. 60. But the additional 25,000 literates produced have cost a crore, or Rs. 1,000 each."*

Such calculations are interesting, but it is doubtful if the two sets of figures will stand inter-manipulation of this kind.

*These rough calculations include in cost of producing a literate in this decade expenditure on buildings which will also be used for producing literates in future decades. This is fair enough, for nothing is debited for cost of buildings used in this but paid for in previous decades.

The argument is of course vitiated by neglect of fall in value of money. But the Education Department was not much affected thereby—in the matter of salaries and the like—till the last year or two of the decade.

SUBSIDIARY TABLE I.

Literacy by age, sex and religion

Religion.	NUMBERS PER MILE WHO ARE LITERATE.												NUMBERS PER MILE AGED 5 AND OVER WHO ARE LITERATE IN ENGLISH.							
	All ages 5 and over.				4-10.				10-14.				14-20.				20 and over.			
	Males.		Females.		Males.		Females.		Males.		Females.		Males.		Females.		Males.		Females.	
	Persons.	Per cent.	Persons.	Per cent.	Persons.	Per cent.	Persons.	Per cent.	Persons.	Per cent.	Persons.	Per cent.	Persons.	Per cent.	Persons.	Per cent.	Persons.	Per cent.	Persons.	Per cent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
All Religions	65	129	21	20	18	119	23	174	26	171	30	818	861	879	91	190	15			
Hindus	73	120	16	20	9	107	23	164	29	108	14	856	870	884	86	180	7			
Muslims	45	107	16	8	3	74	21	128	31	135	16	622	863	864	78	131	8			
Jains	341	878	87	160	28	823	145	963	137	600	73	608	425	912	234	416	18			
Buddhists	330	351	110	93	43	222	113	615	154	663	117	670	446	880	25	97	13			
Christians (Protestant)	791	844	721	420	410	816	780	880	823	618	760	266	146	258	4104	5,704	3,687			
Muslims	33	82	9	17	4	67	12	113	13	123	9	947	907	981	53	94	3			
Christians	243	323	210	125	122	312	41	435	291	415	213	718	648	790	1010	1,200	701			
Tribe Religions	9	16	1	3	1	11	2	27	2	21	1	901	864	878	2	6				

SUBSIDIARY TABLE II.

Literacy by age, sex and locality.

PROVINCE, STATE OR AGENCY	NUMBER PER MILL WHO ARE LITERATE.										
	All ages 5 and over			5-10		10-15		15-20		20 and over	
	Persons	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7	8	9	10	11	12
INDIA	82	139	21	29	10	110	28	174	38	171	20
Provinces	84	144	20	30	9	113	26	179	35	178	19
Ajmer Merwara	111	1	2	41	13	170	31	11	44	227	20
Andamans and Nicobars	10	217	2	21	21	78	24	157	32	260	9
Assam	72	124	14	1	8	110	11	164	27	150	13
Baluchistan	47	76	1	104	70	187	201	217	146	146	166
Bengal	104	181	21	4	11	144	29	214	24	225	1
Bihar and Orissa	51	61	1	18	7	70	8	111	10	126	7
Bombay	6	17	27	4	15	146	42	217	7	184	24
Burma	71	110	11	2	4	77	11	270	16	670	118
Central Provinces and Berar	41	87	9	17	20	180	12	142	18	104	9
Coorg	44	214	58	2	20	143	70	276	121	256	32
Delhi	122	120	40	2	21	12	41	100	3	217	4
Madras	8	173	24	7	12	120	71	204	44	214	23
N. W. F. Province	4	17	10	11	7	47	11	114	20	102	11
Punjab	4	74	1	6	7	3	1	16	17	94	9
United Provinces	42	73	1	14	7	62	3	6	1	61	7
States and Agencies	70	119	26	27	17	93	28	144	47	132	21
Lanka State	147	4	47	43	20	10	10	14	105	20	74
Central India (Agency)	6	24	1	1	1	14	78	11	11	81	6
Cochin State	214	117	112	6	15	21	140	21	174	197	111
Gwalior State	43	77	18	18	5	4	0	11	11	81	7
Hyderabad State	11	57	8	10	5	4	10	6	14	67	8
Kashmir State	4	4	1	1	1	24	3	1	4	61	3
Mysore State	74	141	2	1	12	28	20	174	43	169	19
Rajputana (Agency)	23	68	1	1	1	4	4	60	2	90	5
Sikkim State	45	20	1	2	1	1	70	20	1	127	4
Travancore State	270	1	171	15	148	37	210	437	226	440	160

NOTE.—The figures for Provinces in this and the subsequent tables are inclusive of the States attached to them except in the case of Madras where they exclude Cochin and Travancore.

SUBSIDIARY TABLE III

Literacy by religion, sex and locality.

PROVINCE, STATE OR AGENCY	NUMBER PER MILL WHO ARE LITERATE									
	Hindu.		Jain.		Musliman		Christian.		Tribal Religions.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1	2	3	4	5	6	7	8	9	10	11
INDIA	130	16	575	87	93	9	355	210	16	1
Provinces	137	15	561	117	93	8	380	166	18	1
Ajmer Merwara	140	15	789	60	187	18	871	770	1	1
Andamans and Nicobars	228	48	197	111	214	33	208	300	2	1
Assam	167	18	697	111	8	3	293	136	19	1
Baluchistan	413	119	615	250	140	47	851	683	14	1
Bengal	268	36	109	109	109	6	339	425	14	1
Bihar and Orissa	101	0	99	99	99	8	180	83	12	1
Bombay	151	21	578	127	114	15	469	281	7	1
Burma	258	86	578	325	102	87	324	378	77	3
Central Provinces and Berar	60	8	531	78	25	27	304	255	10	3
Coorg	242	6	124	25	204	24	702	298	14	1
Delhi	150	20	699	162	162	31	360	411	5	1
Madras	170	21	566	82	101	16	210	147	1	1
N. W. F. Province	146	08	441	47	73	2	850	820	1	1
Punjab	113	11	506	47	77	4	140	07	1	1
United Provinces	71	0	507	77	73	8	716	206	1	1
States and Agencies	89	19	564	33	103	15	432	257	8	2
Baroda State	234	42	820	204	399	48	310	178	37	3
Central India (Agency)	56	4	748	63	100	10	700	580	1	1
Cochin State	295	00	660	81	178	18	408	292	12	7
Gwalior State	60	0	441	50	142	20	882	668	2	1
Hyderabad State	47	4	790	35	140	35	308	188	10	5
Kashmir State	124	0	612	129	20	1	275	286	1	1
Mysore State	133	16	470	66	238	62	483	333	9	1
Rajputana (Agency)	67	3	562	23	90	0	630	686	1	1
Sikkim State	61	3	834	834	834	431	227	205	1	1
Travancore State	371	146	238	238	238	50	437	205	1	1

The figures in this table are for persons of 5 years of age and over only

SUBSIDIARY TABLE VI.

Literacy by caste

CASTE	NUMBER PER 1000 WHO ARE LITERATE				NUMBER PER 10,000 LITERATE IN ENGLISH			
	1901		1911		1921		1931	
	Male	Females	Male	Females	Males	Females	Males	Females
	2	3	4	5	6	7	8	9
ASSAM								
Kakita	210	17	147	7	341	7	170	
Abom	107	9	111	7	3	6	168	2
Juri	10	11	111	7	84	2	15	
Koch	17	7	83	2	12	2	61	
Kakhatoy (Marlyrl)	10		91		241	1	70	
Kachari (Tribal)	17		11		10		3	
BALUCHISTAN								
Fatian	17		9		8		2	
Brahm	9		7		2			
Bala (Tribal)	4						1	
BENGAL								
Brahma	714	431	723	710	1118	613	1006	201
Brahman	714	431	723	710	1118	613	1006	41
Kayastha	9	11	7	11	4	103	1860	0
Subarnashil	2	11	7	101	101	63	3471	08
Burak	1	2	1	10	10	11	147	6
Tell and Tell	1	1	102	10	17	12	61	12
Kamar	1	21	20	13	413	9	118	3
Sadrop	1	23	101	14	21	10	361	10
Joi (Jui)	1	11	20	6	288	7	101	1
Taoli	1	1	20	20	478	12	77	14
Nasir	1	16	1	1	708		108	
Bishanab	1	15	2	1	224		147	4
Bai	1		241		118	1	51	
Kalhartha Chai	1	11	204	8	111	7	147	1
Sutradhar	1	12	101		210	5	127	1
Goala	181	12	13	6	217	5	110	
Dhoba	142	8	103	7	148	7	57	
Nama (Dra)	142	6	9	2	171	2	44	
Kalhartha Jallia	110	7	87		102	3	40	1
Rajlanol	101	3	97	2	50	1	16	
Jolaha	41	4	80	3	39	1	21	1
Malo	83	3	54	2	83	1	35	
Bacul	40	2	41	1	70		16	
Muchi	71	1	23		16	1	10	
Hari	77	1	26	1	14		5	
Iauri	11	1	20		7			1
Santal	8		8		2		1	
BIHAR AND ORISSA								
Kayastha	91	81	603	16	1502	51	1002	10
Brahman	304	19	317	18	260	8	100	0
Rabhan	222	20	187	14	120	7	31	
Rajput	208	9	176	6	182	2	44	
Khandait	160		141	4	50		35	
Tell	83	2	77	1	27		7	
Kurmi	70	2	60	1	20		8	
Chai	75	2	50	1	14		7	
Kandu	55	1	40	1	15		5	
Jolaha	50	1	41	1	42	4	14	2
Kolri	50	1	43	1	13		16	
Kahar	43	2	31	2	28	1	15	
Tanti	30	1	32	1	9		6	
Kewat	37	1	75	1	6		3	
Gaura	3	1	27	1	7	1	3	
Hajjam (Hindu)	32	1	27	1	14		9	5
Kumhar	32	1	26	1	9		6	
Goala (Ahr)	26	1	24	1	14		4	
Mhanuk	2	1	27		5		2	
Nuniya	21	1	20		3		3	
Dhobi (Hindu)	20	1	17	1	6	1	2	
Ho (Tribal)	14	1	15		17	1	6	
Pan (Hindu and Tribal)	15		11		2		2	
Santal (Hindu)	13		8		4		1	
Oran (Tribal)	12	1	8	1	4	1	2	
Munda (Tribal)	10	1	10	1	3		3	
Santal (Tribal)	7	1	10		4		1	
Doradh	8	1	7		2		1	
Kandh (Hindu and Tribal)	8		7		1		1	
Chamar	8		7		1		1	
Mushar	3		2		1		1	
BOMBAY								
Brahman	652	144	501	75	1012	72	1172	23
Lohana	343	77	359	21	443	61	327	7
Lingayat	231	16	136	4	69	1	30	
Maratha	58	3	46	2	20	1	22	
Agri	41	3	40	1	9		4	
Kunbi	11	1	94	5	1		27	
Mahar Holiya or Dhed	23	1	10		13	1	1	
Bharvad	10	1	17	1	2		2	
Bhil	4		2					

SUBSIDIARY TABLE VI—*contd.*Literacy by caste—*contd.*

Caste.	LITERATES PER 1,000 WHO ARE LITERATE.				LITERATES PER 1,000 LITERATES IN CASTE.			
	1901.		1911.		1901.		1911.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
BURMA.								
Analawse	865	79	860	19	865		61	15
Kan Gwey	87	201	366	7	80		81	37
Kawa Gwey	360	75	191	61	99	4	66	
Tai Gwey	236	18	16	23				
Wagile	136		66	23	1			1
Kan Chin Gwey	363		64				6	
Palaw-W. Gwey	37		43	1				
Kachin Gwey	21		15		6		2	
CENTRAL PROVINCES AND BEHAR.								
Zawla	436	61	456	9	196		75	3
Wichama	866	66	431	36	12	66	975	
Kajyo	137	13	151		136		63	1
Kajyo	112		116		66		36	
Kurad	63	3	79		19		11	
Kan	76		61		34	1		
Kan	66		36		24			
Kan	61		43		23			
Tai	36	1	45		5			
Kachin	12	6	23		54	7	13	
Kachin	66		23		13			
Kachin	6				66			
Kachin	37		13	1				
Kachin	23							
Kachin	6	1	6					
Kachin								
MADRAS (including Cochin and Travancore).								
Kachin	666	135	667	66	1,366	63	1,661	23
Kachin	491	216	613	167	413		664	
Kachin	661	64	661	23	294	66	66	
Kachin	367	36	136		666	6	67	
V. Gwey	666	61	617		666		112	
Kachin	677	66	67		66		43	
Kachin	666	15	276		79	4	66	
Kachin	152		236	1	2		66	
Kachin	644	36	37	36	663	17	276	
Kachin	646	22	216		237	36	216	
Kachin	623	66	666	66	64		664	
Kachin	636	66	66	63	47	61	91	13
Kachin	661	31	236	36	36		273	
Kachin	711	19	36		663	1	136	
Kachin	66	63	66		46		66	
Kachin	71		136		18			
Kachin	63		13		36	1	67	
Kachin	136		123	7	6		66	
Kachin	76		666	16	166		131	
Kachin	11		136		19	6		
Kachin	119	9	636	66	66		161	64
Kachin	169		36		66		63	1
Kachin	66		36		7			
Kachin	37		26		16			
Kachin	36		24		26	1	17	
Kachin			1	1	1			
Kachin	6		6		1			
NORTH-WEST FRONTIER PROVINCE.								
Kachin	75		63	1	43		76	
Kachin	63	1	63	1	66		61	
PUNJAB (including D.D.).								
Kachin	677		663	66	1,666	66	661	36
Kachin (Agarwal)	666	66	671		664	66	667	
Kachin	614	19	667	13	256	36	663	36
Kachin	61		136		43		294	
Kachin	776	66	43	1	641	1	676	
Kachin	13		13		213	1	676	
Kachin	166		66	7	236	7	64	
Kachin	64		43		61		6	1
Kachin	36		66	1	66			
Kachin	67		66		66			
Kachin	26	1	67		6		36	
Kachin	66		13		67		67	
Kachin	63		63		67		13	
Kachin	76		66					
Kachin	65		65	1	36			
Kachin	63		13		23		61	
Kachin (Agarwal)	1				36			
Kachin	66		1		11			

SUBSIDIARY TABLE VI—concl'd

Literacy by caste—concl'd

CASTE	NUMBER PER 1000 WHO ARE LITERATE				NUMBER PER 1000 LITERATE IN ENGLISH			
	1921		1911		1921		1911	
	Males	Females	Males	Females	Males	Females	Males	Females
	2	3	4	5	6	7	8	9
PUNJAB (including Delhi)—concl'd								
Teli	1	1	10	1	0		7	
Wochi	10	1	7		4		3	
Kachhar	0	1						
Chamar	0	1			2		1	
Jat	4				4		1	
Chakr								
UNITED PROVINCES								
Kaushik	100	00	11		11	0	702	21
Kaushik (Aparaj)	100	00	11		11	0	702	21
Savli	100	13	21	10	11	17	01	1
Trabman	100				11		01	2
Rajput	114	12	10				72	1
Jat	100	12	10		7	1	0	1
Jalsha	100	12	10		1		0	
Barhal								
Kerml	10	1	1	1	10		1	
Teli	10	1	1	1	6		4	
Jhar	10	1	1	1	4			
Gujar								
Nal	10	2	1	1	6	1	1	
Lodha	10	1	10		1		1	
Altr	10		12		1		1	
Dora	10							
Katar	10	1	10	1	6		7	
Malab	0				11		3	
Gadaria								
Kumhar					4		1	
Bharzi					1		1	
Dhoti								
Bhar	4				1		1	
Pa	1				1			
Chamar								
BARODA STATE								
Brahman	100	100	100	100	100	100	100	100
Kutbi	10	10	10	10	10	10	10	10
Koli	10	10	10	10	10	10	10	10
CENTRAL INDIA (Agency) (including Gwalior)								
Baniya	100	10	146	0	170	3		
Brahman	100	11	90		91	4	37	1
Rajput	10	14	50		41	2	31	1
Gujar	10	2	10	1	7		0	
Bhili (Hindu)	10		1		1			
Gond (Hindu)	10		1					
HYDERABAD STATE								
Brahman	100	10	100	100	100	100	100	100
Komati	100	10	100	100	100	100	100	100
Salyid	100	10	100	100	100	100	100	100
Sheikh	100	10	100	100	100	100	100	100
Lingayat	100	10	100	100	100	100	100	100
Kapu	100	10	100	100	100	100	100	100
Sale	100	10	100	100	100	100	100	100
Munnur	100	10	100	100	100	100	100	100
Telaga	100	10	100	100	100	100	100	100
Maratha	100	10	100	100	100	100	100	100
Mutras	100	10	100	100	100	100	100	100
Golla	100	10	100	100	100	100	100	100
Mahar and Mala	100	10	100	100	100	100	100	100
Madiga and Mang	100	10	100	100	100	100	100	100
MYSORE STATE								
Brahman	100	100	100	100	100	100	100	100
Sheikh	100	100	100	100	100	100	100	100
Lingayat	100	100	100	100	100	100	100	100
Vakkaliga	100	100	100	100	100	100	100	100
Kuruba	100	100	100	100	100	100	100	100
Besta	100	100	100	100	100	100	100	100
Golla	100	100	100	100	100	100	100	100
Beda	100	100	100	100	100	100	100	100
Holliya	100	100	100	100	100	100	100	100
Madiga	100	100	100	100	100	100	100	100
RAJPUTANA (Agency)								
Baniya (Mahajan)	100	100	100	100	100	100	100	100
Brahman	100	100	100	100	100	100	100	100
Rajput	100	100	100	100	100	100	100	100
Nal	100	100	100	100	100	100	100	100
Jat	100	100	100	100	100	100	100	100
Mali	100	100	100	100	100	100	100	100
Gujar	100	100	100	100	100	100	100	100
Mina	100	100	100	100	100	100	100	100
Meo	100	100	100	100	100	100	100	100
Kumhar	100	100	100	100	100	100	100	100

CHAPTER IX

Language

Introductory remarks.

151 As with the ethnography so also in the case of the languages of India much of the pioneer work has been done in connection with the decennial census and the interest in the subject which eventually led to its complete and systematic treatment under expert direction, is largely due to the contributions made by census officers in their reports. The chapter on Language in the Indian Census Report of 1901 was written by Sir George Grierson and since that time a scientific linguistic survey has been made, under his supervision, over a large part of the continent. The results of these studies have appeared in the series of volumes of the Linguistic Survey which have been issued from time to time during the last ten years. The languages and dialects are there dealt with individually in their place in the classified scheme according to locality and philological affinity and in each case an estimate is given of the approximate number of speakers based on an analysis of the census figures of 1901 and 1911 collated with the figures arrived at in the course of the Survey operations. The Survey records cover the whole of the Indian Empire except parts of South India and Burma, and there thus remains little of scientific interest which the census can now contribute though copies of the reports of Census Superintendents have been sent to Dr Grierson for use in his work. At the present census information regarding dialects was not asked for but the languages recorded as spoken have been classified according to the scheme adopted in the Linguistic Survey and compiled into the usual tables and comment in this chapter will be confined to a discussion of the meaning and significance of the figures and such points of interest as appear to emerge from them. In regard to Burma the circumstances are different. It was thought advisable to take the opportunity to obtain an improved linguistic and ethnological record and Mr J. F. Taylor of the Indian Educational Department, who had collated the reports received in the preliminary stage of the Linguistic Survey and prepared the grammars and gramophone records of languages was placed on special duty to assist the Superintendent of Census Operations. Mr Taylor has carried out the classification of the languages of Burma as well as the compilation of all the figures shown in the Burma tables and has provided in an appendix to the Burma Report, an article dealing with the indigenous languages and races of the province and explaining the system of classification adopted.

The nature of the return.

152. The main instructions issued to the enumerators for filling up the column of the schedule for languages were as follows —

Enter the language which each person ordinarily uses in his own home. In the case of infants and deaf-mutes the language of the mother should be entered.

The instructions appear precise and simple and were, no doubt, generally understood. But there are many difficulties in the way of obtaining an accurate and useful return of languages. Although the vast majority of the people of India speak, alike in their homes and in their general conversation, one of the major languages of the country there are on the other hand a considerable number who are practically bilingual. In fact, probably the majority of those whose mother tongue is a minor or tribal language or a distinctive dialect are forced to acquire in addition knowledge of the main language of the countryside at any rate if they have emerged from the seclusion of hill and forest and have been brought into contact with the inhabitants of the open country. There must then have been frequent cases when the enumerator entered the language in which the reply to his question was given though further enquiry would have made it clear that this was not the language of the home. On the other hand an enumerator would no doubt occasionally enter without question the name of the tribal tongue, for example Gondi or Korku or Santali without troubling to ask the language spoken though some of these people have now entirely lost their tribal language. Ignorance, however rather than carelessness is probably the largest obstacle in the way of obtaining a complete return of languages in India. The ordinary individual knows nothing of scholastic distinctions such as Eastern and Western Hindi, Rajasthani or Lahnda. To an enumerator in the north of India the language of the

Khasi and Jaintia Hills of Assam. The most important language of the Munda branch is Kherwar, which has 3·5 million speakers and includes Santali, Mundari, Ho and various other tongues spoken by a collection of tribes inhabiting a compact block of country in the Chota Nagpur Plateau. Outside Bihar and Orissa where it has more than two million speakers, forms of Kherwar are spoken by 0·8 million persons in Bengal and 0·2 million in Assam. Besides Kherwar there are a few outlying languages belonging to this branch of the Austro family of which Savara spoken by 0·17 million people in the North of Madras, and Kurku spoken by 0·11 million in the west of the Central Provinces and Berar are perhaps the most important.

Tibeto-Chinese family

155 Several modifications have been made in this family in consequence of the revised classification of languages in Burma. In the Tibeto-Burman sub-family Mikir which was classed under the Kuki-Chin group of the Assam-Burmese branch has now been shown as a language of the Naga group. Mru which was a language of the Burma group has now been included as an unclassified language of this family while Maru and Mangtha, which were placed among the Kachin Burma Hybrids, have now been classed in the Burma group. The Shamese-Chinese sub-family has been renamed Tai-Chinese and the Chinese branch has been added to it while the Karen group of languages has been removed and constituted a new family. The Tibeto-Chinese family contains an extensive collection of languages and dialects, ranging from Burmese with 8 million speakers to Moran with only one speaker. The speakers of this family number 18 millions in India and it has two sub-families, the Tibeto-Burman (12 millions) and the Tai-Chinese (about one million) the former being spoken in Burma and Assam (except the Khasi and Jaintia Hills) and throughout the Himalayan areas. Next to Burmese come Manipuri and Arakanese (each 0·3 million) and Bodo, Yanbye, Bhotia and Garo (each 0·2 million). The chief representative of the Tai-Chinese sub-family is the Shan language but though an effort was made at this census to ascertain correctly the different varieties of this language the entries for Shan unspecified were very large (327 000). The language is spoken in the Shan States and in the adjoining parts of Burma and now claims 921 000 speakers compared with 688 000 in 1911.

Karen and Miao families.

156 The most important languages in the Karen family are Sgaw and Pwo (each 0·3 million) and Taungthu (0·2 million). The two languages of the Miao family Miao and Yao were included in the Mon Khmer branch at the last census. But as in many respects, particularly in the matter of tones, this classification does not hold good, they have now been separated and formed into a distinct family. The speakers number 691 only as the Miao and Yao races come from Southern China and are comparatively recent immigrants into the Indian Empire.

Dravidian family

157 The languages of this family are now divided into four groups (1) the Dravida (2) the Intermediate, (3) the Andhra and (4) the North Western language. Brahui which was classed in 1911 under the Dravida group, has on this occasion been shown separately under the title North-Western Language. The heading "Intermediate Group" now contains the Kurukh or Oraon and the Malto languages, which were formerly shown under the Dravida group and Kandhi or Kul and Kolami which were under the Andhra group. Only Telugu now appears as an Andhra language. The Dravida group, with a total of 37 millions, includes Tamil (19 millions) in the centre and south-east of Madras. Kanarese (10 millions) in the south of Hyderabad, Mysore and the districts of North and South Canara. Malayalam (7 millions) in the west coast of the peninsula from Mangalore southwards and Tulu (0·6 million) in South Canara. The Intermediate group (3 million speakers) is found in scattered areas in the Central Provinces and Berar, Bihar and Orissa, Bengal and in the east of Hyderabad State. The chief languages are Gondi (1·6 million) Kurukh or Oraon (0·9 million) and Kandhi or Kul (0·5 million). The Andhra language viz., Telugu which forms a group by itself and contains about 24 million speakers, is spoken chiefly in Madras (16 millions) and Hyderabad (6 millions) and by small numbers in other Provinces. The Brahui speakers, who number less than two hundred thousand are inhabitants of Baluchistan and Sind.

European

158 Except in the south of India, where the Dravidian languages are spoken by the vast majority and in Burma and the Assam Hills where the Austro and Tibeto-Chinese families preponderate, the languages of the Indo-European family are predominant everywhere being spoken by 233 millions or 74 per cent. of the total population of India. All the indigenous languages of the Indo-European family belong to the Aryan sub-family which is divided into three branches

distinction between Hindi and Urdu has been the subject of considerable discussion in previous census reports. It probably has as Mr Edye points out two aspects, a difference of script and a distinction of mannerism, the same vernacular being called Urdu when a Persian vocabulary is affected and Hindi when Sanskrit words are used. Political and religious considerations also affect the return the Muhammadan community usually preferring to record Urdu as their language. Mr Tallents observes that in Bihar and Orissa the term Urdu is frequently used in describing the language spoken by the tribes who have discarded their tribal tongue and adopted the Hindi dialect of the countryside. The statistics of the two languages as returned at the census are therefore largely due to the caprice of the enumerator and are of little value. Rajasthan and Bihar are regional names for two languages which are classified in the Linguistic Survey as distinct from Hindi. The figures of these languages can, to a certain extent, be reconstructed from the figures of the various dialects which they contain, but popular opinion frequently describes the speech of the Bihari or the resident of Rajasthan as Hindi and the statistics of these languages must necessarily fluctuate accordingly. Of the dialects of Rajasthan Marwari is usually distinguished fairly consistently from Hindi. Banjari or as it is commonly called Lebhani was classified in 1911 as a gypsy language. It is the dialect of the Banjaras or Lebhans and is usually described as such and distinguished from Hindi. Nimari a purely regional name for a dialect spoken in the Nimar district of the Central Provinces, is more or less an academic title, the language usually being locally described as Hindi.

181. It was at one time feared that in connection with the agitation for the amalgamation of the Oriya-speaking tracts an effort might be made to exaggerate the number of Oriya speakers. The Census Superintendent of Bihar and Orissa however reports that no difficulty was experienced on this account and he is of opinion that the statistics were not affected by political considerations and that, except for some small confusion owing to obscurity of script between Oriya and Orain in the Palamau and Purnea districts the return of Oriya speakers was more or less accurate. The number of Oriya speakers in Bihar and Orissa actually declined from 7 820 000 to 7 751 000 a loss which is more than accounted for by the actual loss of population in the purely Oriya-speaking districts of Orissa. On the other hand politics seem to have affected the return in part of the Midnapore district. The number of Oriya speakers in the Ramnagar police station has declined from over 50 000 in 1911 to about 170 in 1921. The explanation is interesting. The people were aware of the Oriya national movement and their leaders guessed that in deciding the matter the Government of India would give weight to the language figures of the census. As they did not want their tract transferred to the neighbouring district of Balasore in Orissa they took care to return Bengali as their language.

182. An effort was made at the present census to secure truer figures of the language spoken in the western portion of the Punjab and parts of the North West Frontier Province and classified under the name of Lahnda a word which means western and was invented by scholars to distinguish the language spoken in these tracts from the true Panjabi. The difference between these two languages is not recognised locally and the number of speakers of each can only therefore be estimated. In consequence however of special instructions issued to the enumerators some 5 090 persons were returned in Sind as speakers of Lahnda. The number of Lahnda speakers in the North West Frontier Province is estimated at about a million including immigrants from the Punjab who speak the language. In the Punjab itself it is spoken in various dialects by over 4,300 000 persons, of these 2 343 spoke the Multani dialect, rather more than half a million the Jatki dialect and rather less than half a million the Lohwari dialect. Lahnda is now the recorded language of nearly 50 per cent of the population in the Multan and Rawalpindi divisions.

183. A considerable discrepancy exists between the estimates of the Linguistic Survey and the figures of the census in respect of some of the minor languages of the Bombay Presidency. The speakers of Khandeshi or Ahirani in the Khandesh districts are estimated in the Linguistic Survey at 1,253 000. The actual census figure of this language was 2 000 in 1901 and 403 in 1911 and Mr Sedgwick ascertained that the language was spoken chiefly by old fashioned people in villages and towns and is everywhere giving way to standard Marathi. As a result of drawing attention to this language in the

the proportion of those who speak Savara, Konda and Gondi. In Central India there are still 240 000 Gondi speakers among the 247 000 persons returned as Gonds by race and of the 508 000 Bhils in Central India no less than 494 000 were returned as speaking Bhil.

In Burma the process of the erosion of the minor languages appears to be proceeding at a much faster pace than in India at present if the figures are to be believed. The number of speakers of Burmese and its dialects has increased since 1911 by nearly 11 per cent while the statistics of other indigenous languages of Burma have risen by rather over one per cent only. The dominance of the Burmese language is therefore emphatic, but the Superintendent thinks that the figures are not entirely trustworthy as in a number of cases the enumerators who are mostly Burmese may have entered the Burmese language instead of the true language spoken in the home by the enumerated person.

But while seclusion and lack of intercourse with more advanced peoples still enables the primitive languages to endure there is no doubt that where they have been brought into contact with the more systematised forms of speech either by the movement of the backward people into more advanced tracts or by the penetration of civilisation into the jungle many of the tribal tongues have disappeared before the dominant Aryan languages. The movement is not merely a struggle between a stronger and a weaker language. It represents partly a change of culture and partly the necessary adaptation of a minority to its environment. Its first sign is always an increase in the number of those who are bilingual. From Baluchistan where an attempt was made to obtain a record of bilingualism, Major Fowle writes—

Primitive people do not take up a secondary language from a scientific interest in linguistics but because it is absolutely necessary to them in their every-day life and the fact that another besides the mother tongue is needed indicates that a struggle of tongues is going on, which is worthy of attention and analysis.

Bilingualism has not progressed in Baluchistan according to the statistics of the last two censuses, but it seems probable that increased accuracy of enumeration has obscured the comparison. We have no actual record of bilingualism elsewhere but there is no doubt that practically all the tribes who settle in the open country soon learn to speak the language of their more advanced neighbours, even if it takes some time before they forget their own. In Bengal though it appears that the Santals, Mundas and Oraons by a large majority still favour their tribal languages of the original tongues spoken by the indigenous peoples belonging to the plains there is only one survival namely the Koch language. The reasons may be social or merely functional. With his absorption into Hinduism and the consequent improvement of his status the more ambitious aboriginal whether he be a Raj Gond of the Central Provinces, a Bhumij of Bengal or a Hill Kachari of Assam is deliberately abandoning his tribal affinities and his native language while on the other hand the Halba of the Central Provinces, who has long been the serf of the Hindu cultivators, has now entirely lost his tribal language probably because apart from linguistic superiority or inferiority it has ceased to be of use to him. This struggle between languages can be found wherever a foreign minority settles down among an established people. The Superintendent of Census Operations, North West Frontier Province points out that even Pashtos is gradually giving way to Lahnda in the Hazara, Derah Ismail Khan and Bannu districts and the proportion of speakers of Kashmiri among the Kashmiri settlers in the Punjab is rapidly declining. In the Baroda State Gujarat the dominant tongue is gradually ousting the non Aryan languages and even encroaching on Marathi Kachchi and Urdu. Not unfrequently the balance is affected by official or scholastic influences, as in the case of the Sambalpur district of Bihar and Orissa where Hindi is giving way to Oriya the official language of the courts and the language of the schools.

103. The necessity of a common medium of conversation and intercourse which has given rise to bilingualism and the consequent displacement of tribal languages has formed the subject of a considerable amount of discussion and suggestion during the last decade and a good deal has been written on the possibility of a *lingua franca* for India. The combined speakers of Eastern and Western Hindi considerably exceed in number the strength of any other individual language in India and if we add to these two languages Bihari and Rajasthani, which so resemble Hindi as to be frequently returned under that name in the census schedules, we get well over 100 millions of speakers of tongues which have-

Distribution of the Population

[illegible]

EXCEL- The values throughout the schedule have been omitted. Show the details do not work in the table of George.

Distribution by Language of the population of each Province, State or Agency

Distribution by Language of the population of each Province, State or Territory.

Province and Language.		Province and Language.		Province and Language.		Province and Language.	
1	2	3	4	5	6	7	8
INDIA.				COORER.			
Western Hindi	8,860	Kurukh or Ganes	74	Kanarese	4,466	Madrasian	9,281
Bengali	889	Tamara or Koring	22	Langoda or Corail	8,436	Tamil	5,076
Telugu	7	Eastern Punjabi	59	Malabar	1,808	Marathi	211
Mal	884	Other languages	94	Tulu	688	Telugu	91
Assam	14	HYABAD AND GHERA.		Other languages	688	Other languages	68
Punjabi	461	Western Hindi	8,444	Western Hindi	8,413	GWARER STATE.	
Kashmiri	228	Orissa	8,848	Rajasthan	221	Western Hindi	2,749
Kanarese	58	Kherwari	438	Punjabi	388	Rajasthan	9,786
Gujarati	262	Langoda	427	Other languages	179	Marathi	73
Orissa	887	Kurukh or Ganes	28	MADRAS.		Gujarati	88
Deccan	72	Khera	388	Tamil	4,211	Other languages	88
Langoda or Western Punjabi	111	Other languages	388	Telugu	8,772	KOTABAD STATE.	
Chowari	187	MORAB.		Malabar	781	Tamil	4,778
Urdu	187	Marathi	8,788	Orissa	78	Urdu	1,211
Kashmiri	58	Guarati	8,788	Kanarese	228	Marathi	1,211
Langoda	83	Mal	1,188	Western Hindi	71	Western Hindi	1,884
Western Punjabi	81	Kanarese	74	Other languages	388	Rajasthan	1,211
Guarati	44	Western Hindi	388	H. W. PROVINCE.		Guarati	88
Punjabi	44	Mal	84	Punjabi	278	Other languages	88
Western Hindi	46	Rajasthan	72	Langoda or Western Punjabi	4,181	KASHER STATE.	
Langoda	243	Urdu	57	Rajasthan	68	Kashmiri	8,884
Other languages	243	Langoda or Western Punjabi	141	Western Hindi	18	Western Punjabi	1,884
AFGHANISTAN.		Telugu	141	English	88	Rajasthan	1,884
Other languages	243	Other languages	141	Other languages	88	Urdu	1,884
AFGHANISTAN.		AFGHANISTAN.		AFGHANISTAN.		Other languages	1,884
Bengali	4,411	Kanarese	278	Punjabi	88	KASHMIR STATE.	
Assam	2,188	Urdu	278	Langoda or Western Punjabi	1,211	Kashmiri	1,884
Western Hindi	488	Mal	278	Western Hindi	278	Urdu	1,884
Urdu	488	Free	278	Other languages	88	Other languages	1,884
Punjabi	488	Punjabi (Hawarish)	278	Other languages	88	KASHMIR STATE.	
Punjabi	488	Urdu	278	Other languages	88	Kashmiri	1,884
Kashmiri	488	Langoda	278	Other languages	88	Urdu	1,884
Kashmiri	488	Langoda	278	Other languages	88	Other languages	1,884
Kashmiri	488	Langoda	278	Other languages	88	KASHMIR STATE.	
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Kashmiri	488	Langoda	278	Other languages	88	Urdu	1,884
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Kashmiri	488	Langoda	278	Other languages	88	Urdu	1,884
Kashmiri	488	Langoda	278	Other languages	88	Other languages	1,884
Kashmiri	488	Langoda	278	Other languages	88	KASHMIR STATE.	
Kashmiri	488	Langoda	278	Other languages	88	Kashmiri	1,884
Kashmiri	488	Langoda	278	Other languages	88	Urdu	1,884
Kashmiri	488	Langoda	278	Other languages	88	Other languages	1,884
Kashmiri	488	Langoda	278	Other languages	88	KASHMIR STATE.	
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Kashmiri	488	Langoda	278	Other languages	88	KASHMIR STATE.	
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Kashmiri	488	Langoda	278	Other languages	88	Urdu	1,884
Kashmiri	488	Langoda	278	Other languages	88	Other languages	1,884
Kashmiri	488	Langoda	278	Other languages	88	KASHMIR STATE.	
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Kashmiri	488	Langoda	278	Other languages	88	Urdu	1,884
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Kashmiri	488	Langoda	278	Other languages	88	KASHMIR STATE.	
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Kashmiri	488	Langoda	278	Other languages	88	Urdu	1,884
Kashmiri	488	Langoda	278	Other languages	88	Other languages	1,884
Kashmiri	488	Langoda	278	Other languages			

Work.—The figures for previous years inclusive of the States attached to them, except in the case of Minnesota, where they include Canada and Iowa.

SUBSIDIARY TABLE III.

Number of persons speaking tribal languages compared with the strength of tribe.

[illegible]

These general population census are most unsatisfactory firstly on account of the difficult form of inquiry defining the degree of disability which it is desired to tabulate and, secondly because the definition has to be applied by householders with no knowledge who will interpret it in different ways and many of whom have no reluctance to admit that they or their relatives suffer from any defect—at least to the degree of need to in the inquiry. This was put most strongly by the Census Commissioner of 1881 who stated in their report (C. 3787 page 71) — “we felt bound to point out, as clearly as we could, how very incomplete are the returns which relate to these afflictions, and especially those which relate to idiocy and imbecility. We have done the best we could, but these unsatisfactory data. We cannot, however, but express our decided opinion that the returns made by persons as to the deficiencies, mental or bodily of their children or other persons are not worth the cost and labour of collection and tabulation. They also quoted the results of an investigation into the admissions into a large idiot asylum during the year following the date of the census, which showed that in one-half of the cases of admissions as old patients between the ages of 5 and 15 no entry had been made on the census schedule which had been filled in a few weeks or months before. The Report on the Census of 1891 characterised these statistics as in all probability excessively inaccurate, while the Report for 1901 it is stated — “Concerning the above named infirmities it is difficult to hardly understand that the machinery of an ordinary English Census is but imperfectly adapted to furnish the required particulars with that degree of accuracy which is required for statistical purposes. It is because experience has impressed us with this conviction that we have abstained from entering into minute details which, had the data been more reliable would have proved highly instructive and useful. The Royal Commission on the Care and Control of the Feeble-minded reports as follows on the unsuitability of the census as an agency for ascertaining facts concerning mental defect — “the census, it appears to us, is not an agency suitable for the ascertainment and classification of facts the nature of which in very many instances can only be learned by the personal observation of men and women whose judgment has been trained and well practised in special branch of medical work. Both for administrative and scientific purposes it would be better we think, to ascertain the facts by special investigation such as that which has been made by our medical investigators, or by means of the cumulative records which we hope may be compiled as confidential documents, as soon as the importance of the subject is recognised. (Cd. 4202, page 198) In this connexion it may be mentioned that the investigations of the Royal Commission in 1906 proved that the Census figures for the mentally defective had been much understated in 1901.

In foreign countries much the same impression prevails as to the unsatisfactory nature of the infirmity inquiry and, therefore, in some cases a technical inquiry conducted by experts into the degree, cause, duration, etc. of the affliction follows the obtaining by the general census of the names and addresses of the infirm. In reply to a question on this point, the Census authorities of the United States of America wrote as follows — “One of the reasons for not including inquiries regarding physical and mental defects on the population schedule of the 13th Census (1900) of the United States was the realization of the impossibility of getting accurate information on these points in a large number of cases, not only on account of the difficulty of defining the degree of impairment which would constitute defect, but because of the sensitiveness of persons affected and their consequent concealment of such defects in themselves and members of their families. These questions, at the eleventh Census, gave rise to much criticism and complaint, and the attempt to secure these data was therefore abandoned. It is observed, however, that at the 13th Census (1910) questions relating to blindness and deaf-mutism have been again introduced, with a view we understand, to the subsequent professional inquiry referred to above.”

At the Statistical Conference held in London in January, 1920 the subject of the record of infirmities in the census was discussed, and it was definitely recommended that the enquiry should cease to be included in the schedules of the Indian census. On the other hand representations were made that the inquiry should be continued at the present census, on the ground that there are, in India few ordinary means of obtaining statistics of any kind on these subjects and that as the errors in the statistics are to some extent constant from census to census, the figures give some indication of the distribution of the infirmities and their quantitative variation from census to census.

168 The main statistics of infirmities are exhibited in Imperial Table XII which is divided into two parts one showing the distribution of affected persons by Provinces and States and the other the distribution by age. Another table, XII A in which the affected are classified by sex and caste has been compiled in the Provinces and States but not for the India Report Appended to this

chapter are three subsidiary tables which give the chief proportionate and comparative figures

169 The marginal statement shows the number of persons suffering from each infirmity at each of the last five censuses and the proportion per hundred thousand of the population which that number represents. There had been a continuous decline in the total number as well as in the proportion of persons recorded as afflicted up to 1901. This fall has been ascribed, partly, to a progressive improvement in the accuracy of the diagnosis and,

Infirmity	NUMBER AFFLICTED WITH RATIO PER HUNDRED THOUSAND OF THE POPULATION				
	1871	1881	1891	1901	1911
Insane	89 7/8	81,000	66,200	74,200	81,132
Deaf mut	150 6/11	100,000	157,100	100,000	100,000
Blind	4 0 6/11	443 6/11	754 10/11	458 8/11	526 18/11
Lepers	102 5/11	100,000	07,110	120 2/11	131 0/11
TOTAL	800,000	813,011	670,817	802,231	870,063

partly, to an actual decrease in the prevalence of the infirmities, owing to the improvement in the material condition of the people, to better sanitation and (especially in the case of blindness) to the increasing number of cures effected with the aid of modern medical and surgical science. In the decade ending

Province, State or Agency	Population afflicted per 100,000	
	1871	1911
India	272	267
Burma	438	150
Baroda	420	234
C P and Berar	416	315
Baluchistan	413	350
Punjab and Delhi	385	377
Kashmir	366	334
United Provinces	323	324
Bombay	310	272
Assam	274	273
Cochin	266	247
N W F Province	262	305
C I and Gwalior	246	163
Rajputana & Ajmer	246	264
Sikkim	236	331
Hyderabad	235	202
Bengal	213	220
Madras	195	210
Travancore	170	115
Bihar & Orissa	177	237
Mysore	167	212
Coorg	83	110

1901 the relatively high mortality of the afflicted in the two severe famines must have been a considerable factor in the decline shown at that census, but the method of compilation adopted in 1901 and in the previous census was defective and, certainly in 1901, many of the persons afflicted must have escaped notice in the course of tabulation. Compared with the year 1891 there was a slight decrease in the total number of persons recorded as afflicted in 1911, the proportion per hundred thousand persons falling from 315 to 267. The small increase in the present decade, amounting to 26,455 persons or one per 100,000, may be due to improvement in record and tabulation but is certainly unexpected. One would have thought that the combination of the influenza epidemic, scarcity and economic depression would have resulted in the disappearance of a large number of these afflicted persons, and this seems, indeed, to have been the case in some provinces. Mr Tallents (Bihar and Orissa) observes —

"In a period of distress and scarcity such as occurred in 1918 and 1919 the infirm are apt to go to the wall. They cannot flee before the storm like their able-bodied neighbours; they have to stay behind and take their chance. The infirm must moreover in the great majority of cases be dependants, and one of the features of the influenza epidemic of 1918, was the number of workers whom it killed off, leaving their dependants to the charity of the well disposed or of Government, while therefore there is no reason to suppose that the influenza was specially fatal to the infirm it must indirectly have made it very difficult for many of them to survive. When the scarcity followed upon the influenza the position of many of them must have become even worse. In periods of distress the purse strings of charity are apt to be tightened and for infirm persons who had just lost their supporters in the epidemic, the position must have been an extremely difficult one. In these circumstances it is highly probable that there was heavy mortality amongst them though it is impossible to estimate its extent."

It is difficult to find anything wrong with this reasoning. Let us look, however, at the figures of the Central Provinces where influenza and scarcity was specially severe, and of the Madras Presidency which escaped comparatively lightly. In the latter Province the number recorded as afflicted dropped substantially and the Superintendent can offer no explanation for the decline. In the Central Provinces the number rose steeply and Mr Roughton thinks that this is due, partly, to the fact that the influenza mortality, which selected adversely to healthy adults, spared the aged and infirm and, partly, because special care is taken of this class

of people in modern famine relief organization and as the famine staff of 1920-21 was generally employed on census duty the infirm were less likely than usual to be overlooked. There is probably an element of truth in both of these apparently contradictory explanations but the case illustrates the hopelessness of attempting to find explanations for variations in figures which depend so much on the vagaries of the record from time to time. Indeed Mr. Grantham, Superintendent of the Burma Census, considers that the very constancy which shows itself in some of the returns at different periods is in itself a suspicious circumstance and discards the statistics of Burma as worthless. In any case such inferences as can be drawn from the tables refer chiefly to the relative prevalence of the diseases in different areas and as this is a matter which does not differ much at different censuses and has been fully discussed in previous reports, I shall content myself with setting out the figures with some brief comments on the factors which are known to influence them and leave them to the mercy of experts. Taking the infirmities individually one-tenth of the total number recorded as afflicted are insane, a quarter are deaf mute rather more than half are blind and one-eighth are lepers.

Insanity

Summary of the figures.

170 The term insanity as used at the census includes not only congenital idiots and raving lunatics but also the weak-minded who are not actually insane. In some countries attempt is made at the census to distinguish between the violent forms of mental derangement, or insanity properly so-called, and idiocy. Even in Europe however it has been found almost impossible to separate the two classes of mental disease, and in India the difficulties are much greater as the enumerators are usually imperfectly educated persons to whom one fool must seem very much the same as another. There is of course a well known connection between insanity, cretinism and deaf mutism which is supported by the census figures since of the double infirmities recorded the combination of insane and deaf mute is still the commonest. The difference between Europe and India in the proportion of officially insane persons is indeed striking. The latest census of England and Wales did not record infirmities but according to the 1911 returns the proportion is sixteen times greater in those countries than it is in India. What part of this difference is due to the greater completeness of the English returns and what to the greater mental and nervous strain of western civilised life it is quite impossible to say. Of all the infirmities insanity is the most difficult to diagnose mental derangements varying so enormously both in degree and in kind. The following criticism of the returns of 1911 by the Superintendent of the Yeravda Asylum is of interest, as it indicates the view of an expert on the accuracy and value of returns of this kind collected through a census agency.

"The Census of 1911 shows the population of Bombay Presidency (including Aden, but excluding the Native States) as 19,672,641. The proportion of females to 1,000 males is given as 920 (all ages). The insane population is given as 6,270 (males 4,173 and females 2,097) or nearly 32 insane (31.2 males and 10.7 females) in 100,000 of the general population. The total accommodation provided in the district asylums then existing was 1,121 or nominally for one out of 55.58 insane, even if the census figures can be accepted as accurate. I think it is, however, certain that the census only enumerates a very small proportion of the insane in the Presidency for the following reasons. The Census Superintendent writes (Census of India, 1911 Volume VII, Part I page 161) 'There is no hard and fast rule as to what constitutes insanity and it is possible that some who are merely half-witted may have been included within this category.' Owing to inherent difficulties no attempt has been made to discriminate between the various degrees of mental derangement. It may be taken as certain that half-witted persons are not sane and therefore are insane. In my experience I have known a medical man, well qualified in an Indian University speak of a person who had been demented for ten years dirty in habits and mindless, as 'not exactly mad, you know but like this for ten years.' Remarks like this are common. I submit that the figures of the census as to insane may be considered far too low from a consideration of this point alone. The Indian and lay mind conceives insanity as madness or acute mania only. The Commissioner was not a medical man, and his judgment and that

The marginal figures show the

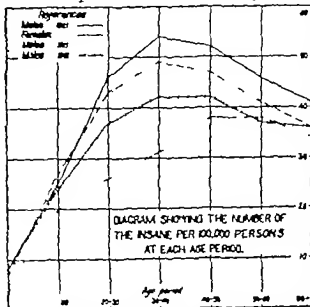
Province, State or Agency	PROPORTION OF INSANE PER 100,000 OF THE POPULATION IN	
	1921.	1911
INDIA.	28	26
Burma	36	30
Bihar	33	44
Assam	51	44
Baroda	47	36
Bombay	42	29
Bengal	41	43
Kashmir	39	40
Coastal	38	32
N. W. F. Province	37	40
Travancore	32	18
Punjab and Delhi	28	25
C. P. and Berar	23	18
Madras	20	20
Hyderabad	20	18
United Provinces	18	18
Mysore	18	23
C. I. and O. Meer	14	8
Bikram	14	10
Rajputana & Ajmer	13	14
Delhi and Orissa	10	12
Coorg	9	21

Dun Ballia and Tehn-Garhwal.

regional distribution of the insane in the different parts of India, excluding the minor units and the small convict settlement and island population of the Andamans and Nicobars where the conditions are peculiar. Burma has recorded by far the largest number of insane persons and Rayputana and Bihar and Orissa the fewest. To what extent the recorded distribution represents actual facts it is impossible to estimate, but it is probable that the regional differences of distribution have some real significance. As was remarked in the India Census Report of 1911 the areas of maximum intensity are either in the hills or along the foot of the hills. In Assam the insanity is far more prevalent in the Hills division and especially in the Lushai Hills than elsewhere. Darjeeling and Sikkim in Bengal are comparatively free but the districts on the West of the Jumna, Chittagong Hill Tracts and the Tripura State are seriously affected. In the United Provinces the proportion of the insane is highest in Dehra

Insanity by age and sex.

172. The low incidence of the disease among children below the age of ten is usually held to indicate that the returns do not include a large number of the congenitally weak minded. I think it unlikely however in any case, that the return of insane children would be at all accurate and I doubt if any inference can be drawn from the paucity of children in the record. The record everywhere shows insanity as more prevalent in males than in females the proportions being 3 to 2. Concealment is much more likely in the case of females, especially as insanity is more common among the higher castes among whom the emmerators have to rely on the information furnished by the male members of the family. But it is probably the case that the better class women in India live a more tranquil life and are less subject to hardship exposure and mental



of adult life with its strains and stresses and its various excitements and vices and the insane are usually short lived. On this subject the Superintendent of Census Operations Bengal writes as follows —

“The sharp rise in the curves before the age of 50 indicates that insanity develops commonly before the age of 50 and rather earlier in males than in females, and the sharp fall later

excitement than the men. Nor are women, as a rule addicted to the use of drugs and other intoxicants. But wherever women come out and join the men freely in the out-door occupations like agricultural labour the sexes appear to suffer almost equally or the difference is very small. The statistics very show that insanity is not determined till the age of ten or if determined is concealed. The record becomes fuller between the ages of 10-20 and from that age the rise is uniform and rapid in the case of males up to the age of 40 and up to 50 in the case of females, when there is a decline. In any case insanity is well known as a concomitant

shows not only that insanity develops very much less frequently after 40 but that the insane do not survive long after they become so. The mortality among the insane in European countries is decidedly higher than among the sane and apparently this is even more noticeably the case in Bengal. Indeed in this country the lunatics' life is not a happy one. The congenital idiot is often kindly treated, but one who develops insanity later receives little sympathy. The medical treatment of the insane is designed with an eye to its cooling effects on the brain and nervous system and takes such forms as shaving the head and plastering it with mud, frequent bathing for preference in tanks overgrown with weeds, confinement in the dark and a low diet, but such treatment alternates with attempts to exorcise the evil spirit with which the unfortunate being is supposed to be possessed. He is made to eat filth and drink nauseous draughts in the hope that it will drive the spirit to leave him. If violent, he is bound hand and foot or has a heavy log of wood fastened to his ankle, and there is little wonder that he does not survive long."

173 It is doubtful whether the return by caste is of any considerable value, as in any case regional and other considerations must influence the figures. The large number of Indian Christians recorded as insane obviously reflects the care of the Missions for the infirm, and the high proportion of insanity among the hill tribes is, as we have seen, possibly due to regional causes, though it is suggested that the prevalence of syphilis among the hill peoples may be a contributory factor. There is some indication that the higher castes, Brahmans, Kayasthas and Banias, have a larger proportion of insane than the lower and this is what would be expected. The following extract from the Baroda Census Report may be quoted with interest —

"Insanity is a disease associated with the socially higher and economically more provident classes. The lower castes which show high ratios in insanity are either those which are addicted to drink like Dheds and Golas, or others whose constitution has been wrecked by long residence in fever-haunted tracts like sections of the Forest Tribes. Amongst these latter drink is also a contributory factor. Occupation seems to exert an undoubted if secondary influence. Agriculture and pasturage seems to have a salutary influence, while religious mendicancy (amongst Bavas and Fakirs) no doubt attracts the insane. The typically urban occupations with their hard conditions of toil have a deleterious effect as seen in the high ratios amongst Sutars, Bhavsars, Somis, and Ghanchis. Social practices, like consanguineous marriages, although they may result in feeble-mindedness and cretinism, do not appear to lead to the more violent forms of mental derangement. Diet has also little to do with the question. Hindu Brahmans and Varnas who live abstemiously and on vegetable diet suffer equally with Parsis and Musalmans, while Kohs and Marathas, whose diet consists of animal food, suffer less than either."

The Superintendent of Census Operations, Assam, writes of insanity as follows —

"The causes of insanity and its local incidence are obscure and it is easier to give reasons which do not account for it than ones which do so. For instance, consanguineous marriages as a cause must be ruled out, for we have hill tribes with strict rules of exogamy exceeding in proportion of insane other areas where cousin marriage is prevalent (e.g., Sylhet with a preponderance of Muhammadans allowing the practice). Nor can any correlation be found between the amount of consumption of ganja by districts and prevalence of insanity, although in individual cases the malady can be traced to ganja. Locality, with its attendant physical conditions, may be a cause yet it is impossible to say at present why our three most easterly hill districts should show far higher proportions of insane than the others on the west and in the centre of the province. The Khasi and Jaintia Hills proportion is the lowest of all districts in the province for males yet few of our people live at greater altitudes than do the Khasis."

174. The number of lunatic asylums in British India and their distribution in Lunatic asylums

Province	Number of asylums	TOTAL ASYLUM POPULATION		
		Persons.	Males.	Females.
Total	23	10,157	8,134	2,023
Assam	1	492	398	94
Bengal	4	1,263	1,062	198
Bihar and Orissa	2	559	491	168
Bombay	6	2,009	1,537	422
Burma	2	1,060	886	174
Central Provinces	1	518	408	110
Madras	3	1,215	915	300
Punjab	1	1,248	1,006	242
United Provinces	3	1,793	1,408	325

each Province together with their total population in the year 1920 is shown in the marginal Table. Various types of insanity are treated in these asylums but the largest number of cases fall under the categories "Mania" and "Melancholia". There are 72,907 insane persons in British India according to the census, and thus about 14 per cent of the recorded insane population is in the asylums. No similar institutions exist in the Indian States and such insane persons as are violent are there for the most part confined in the local jails.

Deaf-mutism.

Distribution and
Variation.

173 A change in the instructions regarding the record of deaf-mutes which has already been alluded to has had a disturbing effect on the statistics. The words *from birth* which formerly qualified the definition of a deaf mute were omitted on the present occasion for various reasons. Experience showed that however the words were placed it was difficult to convince the enumerators that they applied only to the one infirmity and as deaf mutism is practically always congenital it was deemed advisable to omit the words. This change was also in consonance with a suggestion made by the Bombay Government on a recommendation of a committee who were investigating the problem of the education of defectives. The result has, however, been unsatisfactory as it is clear from the age returns that a number of cases of senile deafness must have been admitted into the record,

Province, State or Agency	PROPORTION OF DEAF-MUTES PER 100,000 OF THE POPUL. THIS IS	
	1921	1911
INDIA.	66	64
Bikanir	174	146
Kashmir	124	68
Berara	90	71
Punjab and Delhi	86	84
C. P. and Berar	83	47
Bahawalpur	82	80
N. W. P. Province	81	80
Assam	75	73
Bengal	67	66
M. Sore	60	77
Bombay	55	61
Freeholder	54	39
Bihar and Orissa	53	72
Madras	51	73
Cochin	51	36
United Provinces	30	36
C. I. and Orissa	34	23
Baroda	28	21
Hyderabad	27	23
Rajasthan and Ajmer	24	20
Coorg	15	50

while it is equally clear that, as usual defective children have escaped inclusion. The number of deaf mutes recorded is less by about 10,000 than in 1911 and the proportion in every hundred thousand has fallen from 64 to 60, male deaf mutes having decreased by 4 per cent. and females by 6 per cent. The proportions in the individual Provinces and States in 1911 and 1921 are shown in the marginal table. The largest increase recorded is in the Kashmir State and is ascribed, partly to the change of definition and partly to a real growth of the infirmity in the hilly tracts of the State. The disease appears to be most common in Bikanir and Kashmir but local variations are very considerable. In Assam the infirmity is nearly seven times as prevalent in the Naga Hills as it is in the total Province and in Bengal it is more common in Darjeeling and at the foot of the Himalayas than elsewhere. Deaf mutes are numerous in North Bihar and

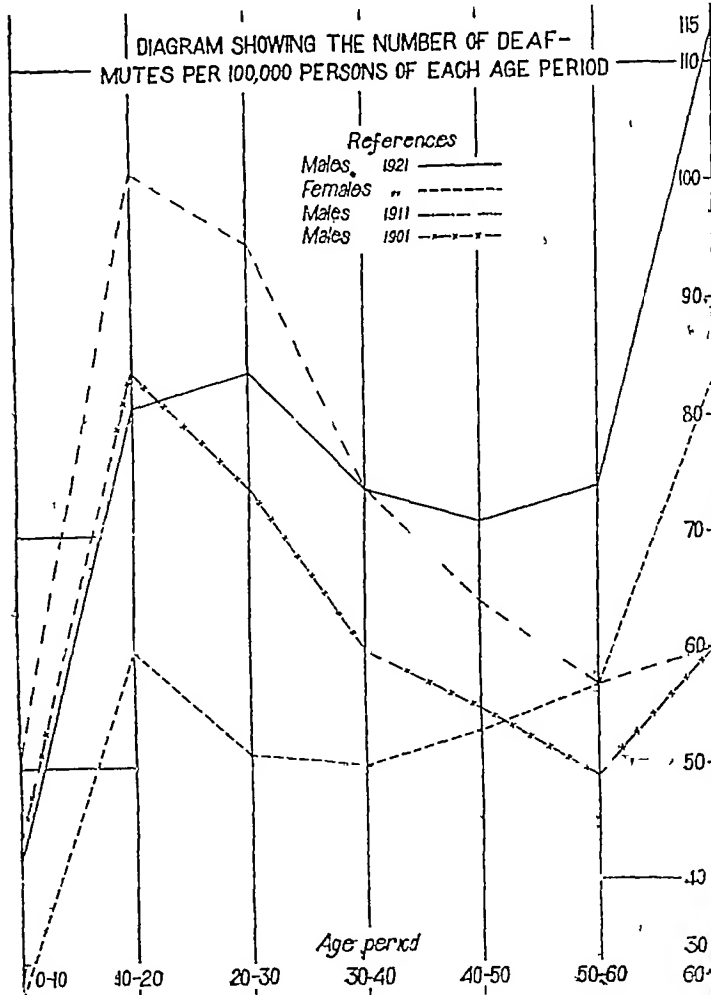
especially in the Champaran district. Mr Tallenta writes —

"The form of deaf-mutism associated with cretinism which is specially prevalent in Champaran and to less extent in Saran and the other districts of North Bihar is frequently combined with insanity. Some enquiries were made in 1901 with regard to the persons returned as deaf mutes and it was then found that out of 178 genuine cases of deaf mutism in Saran and Champaran 23 were insane and 43 were weak minded, while 51 were suffering from goitre. It is probable therefore that on strict investigation many of the persons returned as deaf mutes would be returned also as insane. This would partly account for the low percentage of insanity in North Bihar where the number of deaf mutes is greater than elsewhere.

In Bombay the Konkan division and in the Central Provinces and Berar the Maratha Plain division have returned the highest number of deaf mutes. In Madras the largest number recorded is from the North Arcot district while in the United Provinces deaf mutes are mostly found in the hills. It is well known that deaf mutism is associated with cretinism and goitre and it was shown in the report of last census that the areas of maximum prevalence are generally along the sea coast or along the upper reaches of certain rivers. Mr Edye (United Provinces) writes regarding the infirmity —

"It was proved in 1901 to be closely connected with goitre and there can be little doubt that it is mainly found along the upper reaches of certain rivers the Ganges, Jamna and Rarda systems in the hills and the northern tributaries of the Ghagra in Sub-Himalaya East. And it is associated with some rivers more than with others. In the Gorakhpur district the cretins are congregated in the alluvium of the Gandak in which tract local word (*Lard*) is used to describe them. They are not commonly found in the lower valley of the Rapti. The view that the prevalence of deaf-mutism is connected with the presence of some mineral element in water and that this mineral disappears from rivers soon after they are well clear of the hills is strongly corroborated by the figures."

176 Deaf-mutism being a congenital defect persons suffering from it are relatively short lived. Accordingly the maximum prevalence of this infirmity should be in the lowest age and there should be a progressive decline with each succeeding age-period. From this point of view the marginal diagram suggests that the record of the infirmity is of very little value. As compared with the population at various age-periods the ages under 10 have a distinctly small number recorded. This is clearly due to the reluctance of parents to recognise the infirmity in their children until it is unmistakeable. The numbers are largest in the ages between 10 and 30 and drop steadily until the age of 50, after which there is a noticeable rise. This increase in the later years of life is evidently due to the erroneous inclusion, in consequence of the change in the instructions, of persons who have lost their hearing late in life. If we exclude the excess in the later years due to the change of definition the record of deaf-mutism has decreased since 1911. Like insanity, deaf-mutism is also more commonly returned in the case of males, the difference being probably mostly due to concealment in the case of females. The actual proportion is 661 afflicted females to a thousand males.



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177 As the infirmity, so far as is known, is determined by local physical conditions, the communities that suffer most are those that are relatively most numerous in the areas where the affliction is prevalent, and any analysis of the table showing the affliction by caste would therefore be useless.

Blindness

178 The record for blindness includes those who were born blind and those who have acquired the infirmity during life. Of the four infirmities dealt with blindness is the most easy to diagnose, as it excites neither shame nor disgust and there is little temptation to conceal it. Some few persons are probably included who are merely dim-sighted or have lost the sight of one eye, but entries of words such as *lana*, meaning one-eyed, that are found in the schedules are disregarded in abstraction, and the record of the infirmity is probably fairly truthful even though it may not be complete. In India as a whole fifteen persons in every ten thousand of the population are recorded as blind against fourteen in 1911. Entries of blind males have increased by 6 per cent and of females by 11 per cent. In Baroda the number of entries of blind persons has nearly doubled since 1911, the rise being ascribed chiefly to a more accurate record. There

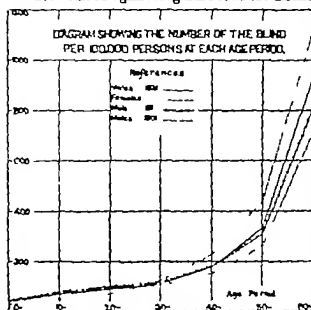
have been large increases in the Central Provinces and Berar Bombay and Burma.

Province, State or Agency	PROPORTION OF BLIND PER 100,000 OF THE POPULATION IN	
	1921	1911
INDIA	133	143
Batoda	219	182
Baluchistan	282	218
Punjab and Delhi	257	254
C.P. & Berar	254	207
United Provinces	220	220
Rajputana and Ajmer	202	215
Bombay	186	144
Burma	186	141
C. I. and Gwalior	182	118
Hyderabad	164	122
Kashmir	143	122
N. W.F. Province	123	187
Cochin	122	120
Assam	87	81
N. India	87	89
Nepal	82	107
Bihar and Orissa	73	70
Bengal	67	48
Cooch	43	33
Travancore	33	24
Sikkim	33	24

The infirmity appears to be common in Baluchistan, the Punjab the Central Provinces and Berar the United Provinces, Rajputana and Smd and generally in tracts with a dry hot climate and a dusty soil. The glaring sunshine and dust-laden winds of the hot weather cause inflammation of the eyes, which frequently results in ulceration and permanent injury. It is less prevalent in Assam, Madras and Bengal where the climate is damp and the country green. But the smoky atmosphere inside the small dark ill ventilated houses and huts is also a frequent cause of affections of the eyes, resulting in blindness, and the prevalence of the disease in the hilly tracts of Kashmir the Punjab the United Provinces and Assam is probably due to the fact that the people are driven by the cold to live in dark ill-ventilated huts. Of the effect on children of study under unhealthy conditions the Superintendent of Census Operations, Travancore, writes—

Whatever may be the reason for the infirmity in the other parts of India, education imparted in the schools under the conditions obtaining in this State, is a potent factor in the causation of the affliction. The pupils live in scattered villages and detached homesteads and attend schools three or four miles away from their homes. Most of them take their morning conveyance at about 8 and leave their houses for schools. In the noon, the majority of them starve, and the rest either take coffee, tea or cakes, purchased from the neighbouring bazaar or partake of the meals brought by them. In the evening they walk home, and after bathing take substantial meals in the night. Mere walking on even roads without ups and downs for seven or eight miles a day at the rate of three miles an hour is considered to be a sufficient exercise for a fully developed person weighing 150 lbs. For immature and growing children of school-going age, such walking is more than what is good, and the starvation all the day with drill and gymnastic as physical exercises in addition, is harmful, and causes debility. The first effect of debility falls on vision. Along with this, if there be any predisposition to weakness of eyes, and with the strain involved in reading and writing, the onset of the malady is sure and certain.

179 The marginal diagram shows the distribution of the blind per 100 000 of



each age-period in 1911 and 1921. According to the returns the number of blind, both children and adults, has decreased. Comparatively few persons suffer from the defect in infancy and early childhood and the number rises gradually up to the age of 60 of the total number half being over 45 and a third over 60 years of age. Unlike insanity and deaf mutism therefore, blindness is essentially a disease of old age, and cataract which is one of the most common causes of the infirmity generally comes on late in life. Women suffer more than men there being 1047 blind women to every thousand blind men but up to 30 males are in the majority among the blind and the higher proportion of blind women over 35 is usually ascribed to the fact that they spend a large part of their lives in their houses cooking over smoky fires, and when

their eyes are affected are more reluctant than males to seek medical treatment

180 The caste statistics are, as has already been explained, incomplete and no very definite conclusions can be drawn from them. It seems probable that the higher castes suffer less from blindness than other classes of the community. Castes like Lohar and Kamar (blacksmiths) and Darzi (tailors), whose occupations are exacting to the eyes, have a larger proportion of blind persons than the agricultural castes or forest tribes, whose work keeps them in the fields or the jungles. With Brahmans blindness has a higher ratio among cooks than among clerks, while religious mendicants and professional beggars naturally have a high percentage.

Leprosy

181 In a recent paper which he read before a learned Society in London Sir Leonard Rogers expressed the opinion that there were at least half a million

Province, State or Agency	PROPORTION OF LEPER PER 100,000 OF THE POPULATION IN	
	1921	1911
INDIA	32	35
Burma	74	58
Assam	50	62
Travancore	51	33
C P & Berar	50	46
Cochin	48	50
Kashmir	46	43
Madras	37	40
Bombay	36	38
Hyderabad	34	28
Bengal	33	38
Bihar and Orissa	32	46
United Provinces	27	30
Baroda	26	22
C I and Gwalior	15	14
Baluchistan	13	10
Sikkim	13	27
Punjab and Delhi	11	13
N W F Province	9	12
Coorg	5	3
Mysore	5	13
Rajputana and Ajmer	4	0

lepers in India. The number actually returned at the census is 102,513, or something more than one-fifth of the number estimated by the highest expert authority on leprosy in India. Dr E Muir, Superintendent of the School of Tropical Medicine and Hygiene, Calcutta, writes —

"I am inclined to multiply your census figures by 10 and will give you a few reasons for believing that the numbers of those suffering from leprosy cannot be less than a million. On the day after the census was taken in Calcutta I had 30 persons attending my leprosy dispensary. They all knew that they were suffering from this disease, as no other disease is treated at this dispensary. I questioned them all personally and out of the 30 only two had had their names entered as lepers in the returns.

Out of the servants, durwans, peons, sweepers, etc., at the School of Tropical Medicine I found on examination that, out of the sixty of these servants, five were suffering from undoubted leprosy, and yet not one of these appeared to

be cognisant of the fact. That is about 8 per cent were suffering from leprosy. Now if we take these two facts together they are very significant. The two factors which stand in the way of lepers declaring themselves are ignorance and shame. In the dispensary cases ignorance was absent as they all knew that they were lepers. Only one of the two factors was present, viz., shame and yet only a little over 6 per cent declared themselves. In the case of the servants I overruled ignorance by making a routine examination and found 8 per cent of lepers. Probably a similar examination made in any other institution in the city would on the average produce the same results or something not very much short of it. I should mention that all these servants were employed in other departments of the School, none of them in connection with leprosy research. The fact is that, as with tuberculosis, a great many people are infected with leprosy and never know that they have it, as the disease is difficult to diagnose in the early stages to those who are not expert and there may be no marked pain, disfigurement or other inconvenience until the disease is far advanced. Many such people are going about, some of them doing no harm, but others again spreading infection broadcast. I have during the last two years treated at my dispensary in Calcutta over 500 leper-non-pauper residents of Calcutta. It has been estimated that there are about 1,000 pauper-lepers in Calcutta, but I am not speaking of these. These respectable residents consist of dhobies, cooks, bearers, confectioners, schoolboys, teachers, lawyers and many others. Most of them are continuing their employment, some are not. I do not flatter myself that during these two years I have been able to attract all the non-pauper lepers of Calcutta or more than a small fraction of them. More and more of these sufferers from leprosy appear every week in increasing numbers. Some come for diagnosis and some come for treatment. You can compare this figure with the number of non-pauper lepers recorded in Calcutta in the census *.

* The total number of lepers recorded in Calcutta city at the census was 259 persons (197 males and 62 females).

I see that large numbers of lepers are recorded in the returns as being 0-1 and 1-2 years of age. Now there is reason to believe that leprosy does not show itself under 2 years of age certainly not under 1 year. It is probable that one of the main factors in increasing the numbers in some provinces and decreasing them in others is the presence of ignorance and shame according to the amount of education of the people and the amount of clothes that they wear. Among the aboriginals clothes are few and the knowledge of medicine is as a rule comparatively advanced. Thus we get large numbers recorded among the aboriginals of Assam. But this is only one factor and there are many others which I cannot touch on here. I think that there is great need in publishing the census returns regarding leprosy to modify them by quoting some of the above facts. Otherwise much harm may be done by giving people a false sense of security and leading to an increase of the factors which make for the dissemination of the disease. I would suggest that in making up census returns about leprosy the medical men and others who are working on the subject locally should be consulted. I see for instance Ajmer Merwara thirteen. Now even in Calcutta I have heard of more cases of leprosy there than that. In Aden two. I have a doctor friend in Aden who is treating far more than that number of lepers.

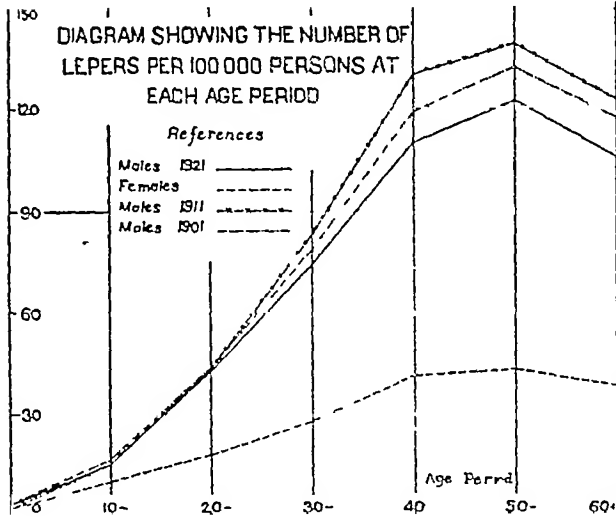
The great difference between the numbers of male and female lepers is doubtless due to the greater privacy with which women are surrounded, but also to a certain extent by the fact that the men travel about more and are thus more liable to contract the disease. I am interested to note that the females in every one of the five decades exceed the males up to the age of 30 (often in the proportion of 2 to 1). After 30 the males exceed the females up to 50 when they become almost equal. This is very probably due (1) to the greater tendency for girls to become infected by parents and relatives by their more constantly remaining in the home, seeing the probability is that in most cases infection takes place from infected clothes and especially bed clothes and (2) to the fact that women are more confined and do not get so much sunlight and exercise as men. This would lead to the disease developing at an earlier age, a sunlight and exercise are two of the most effective preventers of the development of the disease. By the age of 30 the excess of females infected in childhood will have died off, while the disease developing later in the males will lead to their number exceeding that of the females above 30.

That there is general and deliberate concealment of leprosy at the census is well known. The proportion of males returned is considerably more than double that of females and, though it is well known that the disease attacks males more frequently than females the difference between the sex proportions does not approach the census figure, which clearly indicates systematic concealment in the case of females.

Distribution and Varieties.

182. The regional distribution shown by the figures varies enormously ranging from 74 per 100 000 in Burma to 4 in Rajputana. There are also extraordinary variations within the different Provinces and States. According to the figures the infirmity is specially prevalent in Goalpara, Sibsagar Garo and the Naga Hills in Assam. In Bengal it is much more common in West Bengal than in other parts of the Province while in Bihar and Orissa the districts of Manbhum, Cuttack and Puri and in Bombay the Deccan have the highest proportion of lepers. In the Central Provinces the Chhattargarh division and in Madras, the Ganjam, North Arcot and South Arcot districts are the tracts where the infirmity is most prevalent, while it is confined to the Hazara district in the North West Frontier Province and in the United Provinces preponderates in the hill tracts. We have no clue to the reason for these territorial variations which, however as pointed out in an interesting analysis of the Bombay figures, display a definite constancy. In some instances the reasons are artificial, as for example where leper asylums collect, or religious abuses such as Puri attract, the afflicted. Beyond the fact that the disease is associated with personal uncleanness neither climate, altitude nor race offer any satisfactory account of its distribution. If the figures are to be believed the disease is decreasing in British territory and increasing in the States. This difference may partly reflect the existence of legal enactments in most British provinces, which, by legalizing the segregation of indigent lepers, cause them to conceal their affliction or to decamp into territory where they are less unwelcome. In any case as will be seen from the statement in para. 181 the increase in British Territory is not uniform throughout the Provinces, and if the error in the enumeration is as great as Sir Leonard Rogers and Dr Muir think it is doubtful whether such variations in the figures correspond to any actual tendency in the facts.

183 The diagram in the margin shows that the age distribution of lepers follows very closely that of the Census of 1911. The proportion of lepers under the age of ten is small, indicating, if the figures can be accepted, that the number of congenital lepers is infinitesimal. The leper is naturally short-lived and the curve falls sharply after 60 years*.



184 The statistics by caste indicate that communities holding a higher position in the social scale, with a high level of civilisation, are comparatively immune from this disease. In the North-West Frontier Province the Superintendent of

Census Operations says —

“Want of personal cleanliness is a most potent cause of leprosy in the Hazara hills, and of all the tribes of Hazara, Gujars are the most indifferent to hygienic considerations. They live with their cattle, goats, and sheep in the same rooms and their houses are ill-ventilated and insanitary to a degree.”

The same factor operates more or less in other Provinces and States. In Bihar and Orissa Bauris, Chasas and Tambulis have the most lepers and Kewats, Dhumbas and Dhobis in the Central Provinces. The affliction is prevalent among Pallans and Paraiyans and to a less extent among Cherumans, Madigas and Malas in Madras, while in the United Provinces lepers are most numerous among the hill people. The high incidence of leprosy recorded among Christians is obviously due to the fact that almost all the leper asylums are managed by Christian Missions.

Province.	NUMBER OF	
	Lepers in Asylums	Inmates
Total	89	8,080
Assam	2	82
Bengal	3	720
Bihar and Orissa	10	471
Bombay	14	1,102
Burma	4	570
Central Provinces	9	1,231
Madras	12	810
Punjab	6	336
United Provinces	13	903
Baroda	1	51
Central India	3	50
Cochin	1	30
Gwalior	1	10
Hyderabad	1	50
Kashmir	3	127
Mysore	1	27
Rajputana	2	218
Travancore	3	242

The total number of asylums in India has increased from 73 to 89 since 1911 and the inmates from five to eight thousands. About 78 per cent of the total number of lepers are in asylums which are maintained by Government, Municipal Boards, Indian States and Missionary Bodies. According to the latest report of the Mission for Lepers in India and the East, there are 5,168 lepers in the 51 asylums maintained by this Mission alone. The discovery of a new treatment by the injection of the products of the active principle of *chaulmogra* and other oils has

held out new hopes for the unfortunate persons afflicted by this disease. Research is now being carried on in the Calcutta School of Tropical Medicine by Dr Muir, whose opinion it is that the treatment results in an improvement in almost all cases up to a certain point and then an arrest, after which the improvement can generally be continued by other treatment. Sir Leonard Rogers, to whose inspiration this work owes its origin, also considers it clear that a very great advance has been made in the treatment of leprosy by the Calcutta investigation.

185 The Superintendent of Census Operations, Punjab, has attempted an interesting enquiry into the influence of cousin-marriage on the statistics of infirmities. A special enquiry into over 1,000 marriages among Muhammadans suggests that for pure Musalman castes a percentage of about 25 first-cousin

* Sir Edward Gait in his Bengal Census Report of 1901 refers to an estimate which puts the life of a leper attacked with tuberculous leprosy at nine and half years and with anæsthetic leprosy at eighteen and a half years from the date of attack. This would account for the declining proportions of lepers at the advanced age periods.

marriages would be found throughout the Punjab. After analysing the statistics of certain distinctively Hindu and distinctively Musalman castes respectively Mr. Jacob says —

We may provisionally conclude that in the Punjab Hindus suffer more from blindness and leprosy than do Musalmans but that Musalmans are, on the whole, more liable to deaf mutism than Hindus. Hindus and Musalmans seem equally liable to insanity no deduction unfavourable to the latter community being justified from the single instance (out of 8 possible instances) of an excess of Musalman insane among males in the Indo-Gangetic Plain. So far then as this analysis goes there is nothing to show that consanguineous marriages are productive of an insane blind or leprosy diathesis; the Hindu community containing as many as if not more persons infirm from these causes than the Musalman community. The results of a separate analysis of the statistics of deaf mutism suggest (1) that Musalmans apart from the practice of consanguineous marriage, are less liable to deaf mutism than Hindus or (2) that deaf mutism cannot be associated with only a single pair of allomorphous Mendelian elements.

SUBSIDIARY TABLE I.

Distribution of the infirm by age per 10,000 of each sex.

AGE	INSANE										DEAF MUTES									
	Males					Females					Males					Females				
	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Total	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0—5	121	102	150	170	181	142	139	190	183	218	313	403	410	453	424	397	409	486	532	513
5—10	539	547	582	588	669	553	568	633	567	652	1 284	1 438	1 484	1 420	1 209	1 313	1 446	1 548	1 439	1 274
10—15	761	833	921	820	888	803	876	931	820	983	1 773	1 529	1 621	1 310	1 295	1 332	1 454	1 525	1 152	1 185
15—20	810	940	928	945	990	904	1 028	1 015	967	1 007	1 043	1 217	1 270	1 078	963	1 004	1 223	1 211	1 029	881
20—25	1 024	1 118	1 027	1 054	2 204	993	1 095	1 012	1 011	1 867	972	1 142	990	969	1 733	961	1 143	970	953	1 580
25—30	1 273	1 270	1 217	1 232		1 053	1 013	968	990		997	1 049	982	890		883	975	888	862	
30—35	1 342	1 316	1 232	1 263	2 065	1 113	1 126	1 103	1 103	1 788	886	877	859	824	1 427	847	861	870	803	1 288
35—40	1 049	976	989	953		867	790	798	863		648	570	545	605		573	529	501	519	
40—45	937	960	962	990	1 433	1 025	996	1 001	971	1 500	620	576	580	623	1 079	661	611	590	630	1 069
45—50	618	574	572	560		634	571	537	592		398	309	317	370		383	302	313	366	
50—55	581	558	576	563	833	733	706	665	719	1 031	429	333	347	456	795	479	369	397	485	803
55—60	272	230	246	278		305	297	274	317		228	136	139	246		220	140	140	250	
60 and over	623	567	508	588	737	857	795	846	897	1 054	819	401	448	738	1 015	945	478	540	951	1 316

AGE	BLIND										LEPERS									
	Males					Females					Males					Females				
	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881
1	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Total	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0—5	265	317	303	411	307	201	226	211	278	206	68	30	46	45	47	101	67	100	92	93
5—10	540	557	585	648	618	357	360	385	415	304	119	70	108	89	129	203	150	206	166	247
10—15	381	509	602	648	654	342	366	448	411	394	27	209	271	240	273	448	408	456	421	432
15—20	464	541	575	589	552	301	376	419	409	374	422	381	418	406	451	629	647	662	625	647
20—25	490	604	601	607	1 156	361	457	458	440	899	612	587	551	556	1 445	767	835	781	735	1 670
25—30	546	646	665	632		433	510	520	517		597	886	911	877		960	916	926	926	
30—35	600	688	696	662	1 143	517	646	641	620	1 040	1 174	1 170	1 220	1 162	2 370	1 159	1 186	1 146	1 185	2 012
35—40	531	546	541	560		507	507	500	535		1 195	1 206	1 159	1 209		999	980	970	998	
40—45	603	775	754	695	1 184	756	831	822	757	1 252	1 426	1 501	1 514	1 22	2 594	1 299	1 268	1 291	1 295	1 637
45—50	571	538	519	564		597	549	522	584		1 023	1 050	950	995		844	807	752	776	
50—55	604	615	566	740	1 155	1 038	1 075	1 027	888	1 569	1 129	1 159	1 187	1 163	1 670	955	1 079	1 051	991	1 49
55—60	77	442	453	623		629	487	457	697		57	491	487	493		447	449	429	477	
60 and over	3 531	2 533	2 550	2 610	3 011	3 931	3 610	3 563	3 444	3 552	1 16	1 164	1 125	1 170	1 252	1 161	1 182	1 179	1 250	1 07

NOTE.—In this table those infirm whose age was not specified have been left out of account.

Number of persons afflicted per 100,000 of the

PROVINCE, STATE AGENCY.	INDIA										Dutch-INDIA									
	Male					Female					Male					Female				
	1921	19	1901	190	191	1921	1911	190	19	1901	1921	1911	19	1901	1901	1921	191	1901	1901	1901
	1921	19	1901	190	191	1921	1911	190	19	1901	1921	1911	19	1901	1901	1921	191	1901	1901	1901
1																				
INDIA.	23	21	22	22	23	23	22	17	21	22	22	24	22	22	183	22	22	22	27	27
Province.	23	22	22	24	24	22	21	19	22	22	22	24	22	22	22	22	22	22	22	22
1. Java Province	21	22	21	22	22	22	22	12	22	22	22	22	22	22	22	22	22	22	22	22
2. Assam	27	21	27	22	27	23	27	22	22	22	22	22	22	22	22	22	22	22	22	22
3. Madras	22	27	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
4. Bengal	27	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
5. Bihar and Orissa	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6. Bombay	22	27	24	22	24	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22
7. Madras	21	22	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Central Province and Berar.	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Coorg	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
14. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
11. N. W. Province	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
12. Punjab	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
13. Delhi	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
14. United Provinces of Agra and Oudh.	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
15. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
16. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
17. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
18. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
19. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
20. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
21. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
22. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
23. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
24. Madras	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22

Note:—The figures for provinces include those for the States attached to them, except in the case of the Madras Province, which includes the Madras, Malabar, and Coorg Provinces.

lation at each of the last five censuses.

BLIND										LEPERS										Serial No
Males					Females					Males					Females					
1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	1911	1901	1891	1881	1921	
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
138	121	164	216	160	145	120	171	240	46	51	48	68	84	18	18	17	23	29		
140	133	164	223	158	145	133	168	250	48	55	54	73	88	19	20	19	25	30		
249	120	181	355	283	301	125	209	588	3	3	8	-	0	2	2	3	3	3	1	
94	97	107	74	96	87	01	105	57	80	90	125	182	96	70	32	30	60	38	2	
				276	260				18	14				7	5				3	
235																				
78	78	80	84	119	66	63	67	75	113	48	56	60	104	141	18	19	23	36	51	4
111	112	122	160	82	104	104	123	184	48	71	76	82	103	17	23	24	26	20	5	
136	84	149	234	207	153	87	156	300	48	52	38	69	75	23	23	15	4	20	6	
181	105	172	152	205	150	117	220	162	98	79	56	117	101	49	37	25	52	33	7	
173	155	166	220	307	230	201	102	288	61	58	78	91	103	39	33	38	39	30	8	
47	47	45	49	92	69	45	63	51	90	3	6	6	13	25	-		4	14	9	
83	91	101	150	86	79	88	104	167	56	62	54	53	67	10	20	17	18	25	10	
161	123	108	295	133	151	132	245	341	11	17	18	16	23	7	8	10	7	11	11	
249	208	343	506	259	261	314	361	556	15	17	26	-	65	6	8	11	13	27	12	
185				136					3					1					13	
208	168	220	270	256	234	178	241	723	44	48	36	58	63	11	11	11	12	16	14	
128	55	165	134	171	143	50	193	137	31	29	17	31	35	14	11	8	12	16		
129	75	161	248	395	204	95	235	551	35	31	18	2	30	16	12	10	14	17		
109	41			202	125	35			21	19	6			10	9	4		10	17	
162				227					18					6						
133	113	133	50	125	125	107	105	47	70	73	57	66	27	25	28	25	31	23	18	
122	15	100	128	157	121	9	84	110	47	41	4	39	42	20	15	2	13	18	19	
154	115			144	152	97			69	9	72			30	26	36		20		
104	79	168	89	50	94	67	105	98	8	18	17	22	16	2	8	8	14	9	21	
185	78	27		230	247	79	379		6	9	6	21		2	7	7			17	
36	71			40	21	57			14	16	5			12	40	25			27	
42	42	46		35	29	29	37		71	49	68	51		29	17	28	17		24	

where they are for British territory only and Madras where they exclude those for Cochin and Travancore not recorded at all, or they were recorded for a very small number of persons

SUBSIDIARY TABLE III

Number afflicted per 100,000 persons of each age period and number of females afflicted per 1 000 males.

AGE-PERIOD.	NUMBER AFFLICTED PER 100,000.								NUMBER OF FEMALES AFFLICTED PER 1 000 MALES.			
	INSANE.		DEAF MUTES.		BLIND.		LEPERS.		Insane.	Deaf mutes.	Blind.	Lepers.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.				
1	2	3	4	5	6	7	8	9	10	11	12	13
ALL AGES	23	23	70	49	145	180	66	18	621	661	1,847	280
0-5	3		18	14	22	21	3	1	743	816	786	668
5-10	12	8	61	43	84	38	4	3	648	677	698	648
10-15	20	16	77	60	67	50	9	8	667	641	616	661
15-20	22	23	87	60	79	60	23	14	705	636	679	667
20-25	44	25	88	84	80	66	36	16	612	654	790	476
25-30	49	26	80	49	91	78	47	20	533	593	831	406
30-35	64	30	73	50	106	103	66	26	533	633	956	375
35-40	66	34	71	50	120	120	66	27	523	666	1,001	318
40-45	63	37	70	61	180	104	103	35	666	707	1,143	318
45-50	82	41	71	84	310	273	120	45	647	637	1,081	314
50-55	45	37	60	84	300	378	118	41	796	729	1,203	331
55-60	49	40	66	67	417	560	120	49	707	664	1,220	326
60 and over	41	34	114	83	932	1,123	106	36	803	782	1,253	378

NOTE.—In this table there are no special entries for the deaf and blind.

CHAPTER XI.

Caste, Tribe, Race and Nationality

186 In this chapter will be discussed the results of the information obtained in column 8 of the census schedule The instructions for filling up this column run as follows — Introductory remarks.

“Enter the caste or tribe of Hindus, Musalmans, Jains, Sikhs, Aryas, Brahmos and aboriginal tribes, and the race of Christians, Buddhists, Parsis, etc”

Subsidiary instructions which were issued to the census staff explained more fully what was required, namely the main racial, social and sectional groups into which the people of India are divided The census in most countries includes an enquiry into the nationality of foreigners in the population In many of the more advanced countries intermarriage and strong national sentiment have practically obliterated racial distinctions But where, as in parts of Eastern Europe and in America and the colonies, the population is divided on fundamental lines of race or colour which correspond to differences in cultural and economic progress, the distinction is usually retained in the statistics of the periodic censuses In India the sense of a common political nationality has never in the history of the people achieved sufficient intensity to override the factors of cleavage which are inherent in the social system In a population divided into innumerable groups, each having its own character and traditions, the enquiry “what caste are you?”, or more simply “who are you?”, is recognized as referring to the racial, tribal or social group and is a question which has to be asked wherever clear identification is required, whether it be in the courts of law or in every day life The question is always understood by the individual to whom it is put and the answer immediately gives his recognized place in the social structure

Although the term *race*, *tribe*, *nationality* are used in this chapter in the general sense in which they are employed in current literature rather than in any strictly technical or scientific sense, it may be of interest to give some of the stricter definitions of the words In an anthropological sense *race* denotes “a main division of mankind the numbers of which have important physical characters in common” and is usually applied to stocks of considerable antiquity For the purposes of this report we can use *race* in making such obvious contrasts as that, for example, between a Parsi and a Maratha, a Pathan and a Telugu, a Bengali and a Burman, a Latin and a Teuton, without enquiring the age and origin of the differentiation A *tribe* according to Dr Haddon is “a group of a simple kind occupying a concentrated area, having a common language, a common government and a common action in warfare” If we add the words “a tradition of common origin” and interpret the words “government” and “warfare” as representing respectively the internal organization and the external attitude towards other communities, the definition may roughly apply to our ideas of the aboriginal tribe and the tribal sections of the Pathans and Rajputs

187 It will be seen from the form in which the question is put in the census schedule that the factors intended to be recorded differ for different sections of the communities We may distinguish in the first place Indian peoples and Foreign peoples In the case of the latter what was required was their country of domicile or nationality The number of foreigners, as we have already seen in Chapter III, is comparatively small The vast majority of those from over the seas are of British nationality, while those from across the frontiers, such as the Chinese, Afghans and Nepalese, are fairly easily identifiable On the other hand there are a certain number of foreigners of mixed parentage and, perhaps, a few foreign women married to men belonging to countries other than their own, whose actual political nationality would be hard to determine Such persons, if they do not form a numerous or important element, are neglected in the tables of this chapter, which are selective rather than comprehensive The remainder of the foreign element, except in so far as it has mingled with the home-born and become either absorbed or at least permanently domiciled in India, Indian born and Foreign born

is best distinguished by birthplace and has already to a large extent been discussed in the chapter dealing with that subject.

values of Indian
caste.

188 Apart from the Anglo-Indian domiciled community which occupies a peculiar position in the Indian social organization the home-born population of India proper is divided both by the main religions and also into groups which are based on various other differentiating factors. The Parsis still retain their racial exclusiveness and their foreign religion and traditions. The Muhammadans are roughly divided into four main tribal divisions, Moghul Pathan Sayyid and Sheikh of which the first three include most of the Muslims of genuine foreign origin and the last contains also a considerable proportion of the Indian converts to Islam. Within these main divisions there are innumerable tribal groups while alongside of them among the more recent converts there are numbers who retain their former caste or functional group. Christians can be divided into Europeans (and Americans) Armenians, Anglo-Indians and Indian Christians. Of the Indian Christian converts the majority have given up their previous distinctions of caste and tribe but some (chiefly of the highest or the lowest groups) still retain them. The Goanese Christians form a distinctive group by virtue of difference of race and to some extent of culture. The Sikhs, a religious and military group are mostly recruited from the Hindu castes. Some retain their caste while others prefer to merge themselves as far as possible in the general community of the Khalka. The primitive and aboriginal peoples are divided into tribes some of which have racial and others territorial origin. Among the Hindus and Jains all the various factors of combination, fission or seclusion have been crystallized into the institution of caste and, as the Hindu and tribal population forms nearly three-quarters of the population of India the discussion of caste has naturally always occupied a prominent part of this chapter.

Reasons for the
return of caste.

189 Serious suggestions have however at various times been made in favour of the omission of the question regarding caste from the schedules and the suppression of the classification of the population by caste and tribe. A proposal to this effect was made in connection with the 1901 Census mainly on the ground that the distribution of various castes and tribes in the population changed only at large intervals and that it was not necessary to obtain figures at each decennial enumeration. The subject was revived from a more interesting point of view by the tabling of a resolution in the Legislative Council in 1920 attacking the caste enquiry on the grounds (a) that it was undesirable to recognize and perpetuate by official action the system of caste differentiation and (b) that in any case the returns were inaccurate and worthless, since the lower castes took the opportunity of passing themselves off as belonging to groups of higher status. Owing to the absence of the mover the resolution was not debated but the fact of its proposal drew attention to two aspects of the return of caste viz (a) its value for demographic purposes and (b) its statistical accuracy. Now whatever view may be taken of the advantages or disadvantages of caste as a social institution it is impossible to conceive of any useful discussion of the population questions in India in which caste would not be an important element. Caste is still the foundation of the Indian social fabric and the record of caste is still the best guide to the changes in the various social strata in the Indian society. Every Hindu (using the term in its most elastic sense) is born into a caste and his caste determines his religious, social economic and domestic life from the cradle to the grave. In western countries the major factors which determine the different strata of society viz. wealth education and vocation are fluid and catholic and tend to modify the rigidity of birth and hereditary position. In India spiritual and social community and traditional occupation override all other factors. Thus, where in the censuses of western countries an economic or occupational grouping of the population affords a basis for the combination of demographic statistics, the corresponding basis in the case of the Indian population is the distinction of religion and caste. Whatever view may be taken of caste as a national and social institution it is useless to ignore it, and so long as caste continues to be used as one of the distinguishing features of an individual's official and social identity it can not be claimed that a decennial enumeration helps to perpetuate an undesirable institution. Mr Thyagarajayyar (Mysore) writes —

"Whether caste is good institution is a question not yet out of the region of controversy and whether it is more alive than dead or more dead than alive it is certainly not too difficult a

principal in the life of the people as to be altogether ignored. In journeying by trains, in the bustle of city life, in reformed and progressive circles it may seem nearly extinct, but it is still there an institution forming the people into groups for the purposes of daily life, which though at times provoking bitterness that does not seem native to it has on the whole certain conveniences, and till the mass of the people outgrows it a very real demological interest attaches to it and it is worth the while, alike of the Government and of the people, to gather material for the study of its effects on the growth of society *"

190 Though there is probably no part of the census which interests the general public so much as the entry of caste this fact does not as might have been supposed always tend to enhance the accuracy of the record. Special efforts were made in the Censuses of 1901 and 1911 to obtain accurate and complete entries of caste and lists of caste names were drawn up for reference as well as lists of indefinite and ambiguous terms which the enumerators were instructed to avoid as giving no clue to the actual caste of the person so described. The accumulated experience gained from the records of these censuses and of the ethnographical survey was utilized to the full, both in guiding the enumerators and in interpreting in the compilation offices obscure entries found in the record. Except perhaps in tracts such as parts of Assam, where the foreign population is large every man's caste is known locally and as in the vast majority of cases the enumerator is a local man it is probable that apart from such reasonable percentage of mistakes as is inevitable in the course of the various processes of copying and classifying the record of caste is fairly free from errors due to ignorance and carelessness. A much more serious source of error arises from intentionally false entries and misrepresentations of caste. To a Hindu his caste is the determining factor in his life and beside it his age civil condition, birthplace and even his occupation are matters of comparative indifference. It was therefore difficult for the individual to appreciate that the object of the enquiry was merely to ascertain the numbers of each caste, and the ancient tradition that the king or the government was the ultimate authority in determining questions of caste probably helped the popular feeling that the effect of the census record, so far as the individual was concerned, would be to fix his particular position in the social scale. The opportunity of the census was therefore seized by all but the highest castes to press for recognition of social claims and to secure, if possible, a step upwards in the social ladder. This attitude has been strengthened by the recent development of caste *sabhas*, or societies whose purpose is to advance the position and welfare of the caste. With a more efficient organization the communal feeling of individual castes has become more articulate and the number of the petitions received by the Provincial Superintendents the Local Governments and myself from castes regarding their record in the census and the strength with which they have been pressed, is a feature of the recent census. It was essential, of course that the census should confine

Difficulties of the return of caste.

Name of caste.	Title claimed
1 Bhojak	Brahman
2 Brahmbhatt	Brahman
3 Chasi Kaibartta	Mahishya
4 Jaha Kaibartta	
5 Jangida Tarkhan	Jangida Brahman
6 Kachi	Kachhwaha
7 Kahar (Rawani)	Chandravanshiya Kshattriya
8 Khattri	Kshattriya
9 Nai	Thakur
10 Panchal	Vishwa Brahman
11 Prodhi or Karmkar	Kshattriya
12 Sahoo or Saha	Vaishya Saha
13 Subarnavanik	Vaishya
14 Sunar	Maith or Medh Kshattriya or Rajput
15 Sunri, Sundi and Kalwar	Ognikul Hoihoya Wongshya Kshattriya
16 Tambuli, Tamoli	Tambuli Vaishya or Nagbansi Kshattriya
17 Tanti	Vaishya Basak or Tantavaya
18 Yogi Brahman	Varna Brahman.

itself to a record of existing facts and avoid the position of arbiter in questions of caste claims. The matter was dealt with in various ways. In the first place no classification of castes was attempted in the tables, caste names being arranged in alphabetical order. A large number of the caste claims are for the status of "Kshattriya" or "Vaishya" and I directed that these general names, which do not now indicate castes but are ancient social groups, should be avoided. Again the claim could often be satisfied by a formal

permission to enter the caste under the coveted title, provided that that title was

* The opposite view has however been strongly put by Mr L. Middleton in the chapter on caste in the Punjab Report. Mr Middleton holds that the caste feeling among the lower classes of the Punjab is much less strong than is ordinarily imagined and that the insistence on the enquiry and record of caste in all official documents on all official occasions is undesirable and tends to foster a social distinction which among the lower classes is rapidly dying out.

distinctive and did not create confusion with other groups. The title being known the correct classification of the group in the tables was easy. Though the ordinary rule was that the enumerator should enter the caste name given by the person interrogated provided it was a definite and recognised name of a caste, the enumerator himself was often as interested in the caste entry as the general public and, as a local man and often a local official, probably knew the caste of most of the people of his block and could, and did resist claims which were not popularly admitted. It is unnecessary and perhaps inadvisable to give here individual instances of the manner in which claims were dealt with but the information given in the margin on page 223 regarding petitions which were sent to me usually on a printed form by castes regarding their record is of interest. The Census Superintendent of Bengal gives a list of thirty five different claims to Kshatriya Vaisya and other status which, as he says, were among those most strongly pressed by the caste scholars and there are similar lists in most of the provincial reports.

Source of the return
of caste

191 Although it was necessary to ask and record the caste of every person in the schedule not all castes have been tabulated in the census reports. A full record of castes was made in 1901 for the purposes of the ethnographic survey. The number tabulated was reduced in 1911 by excluding those which fell below a certain percentage of the population. Still further reduction on these lines has been made on the present occasion and even in those castes which have been tabulated the statistics given do not always represent the full strength of the caste, as their number in districts where their total strength fall below the fixed minimum percentage of the local population has been omitted. The tables can therefore only give a rough idea of the strength of the caste and elaborate tables have not been prepared for the India report. For fuller lists of the castes of India and of the provinces as well as for discussion regarding the origin, meaning and structure of caste, reference should be made to the reports of the previous censuses and to the records of the ethnographic survey. On the present occasion the principal interest in the caste figures lies in their combination with other demographic statistics such as age, sex, civil condition and education and so forth and in this chapter discussion will be confined to a few aspects of interest and importance. In Parts I and II of Imperial Table XIII the figures of the main castes of India and of each Province are given so far as they are available and within the limits of accuracy indicated above. Statistics of selected castes, tribes and races are combined with those of literacy in Table IX, Age and Civil Condition in Table XIV and Occupations in Table XXI and Infirmities in Table XII A in the Provincial tables.

192 Unfortunately the enormous complexity of the caste system makes it impossible to combine large groups of the population on the basis of caste. No satisfactory method of classifying castes for the purposes of demographic statistics has been discovered. Though there undoubtedly exists a rough order of social precedence it varies in different localities, and it is impossible to find a simple set of principles which would enable such an order to be satisfactorily applied to a large group of the population. Traditional occupation has been used as the basis of classification in the past. But many castes have long abandoned their traditional occupation and others, e.g., some of the traditional toddy drawers and liquor sellers, are strongly repudiating theirs and are seriously offended if reminded of it while as an index of economic status traditional occupation is hardly a useful criterion where the beggar is king and the skilled craftsman may be an outcaste.* Nor do the variations in the customs of early marriage, polygamy and the restrictions on widow re-marriage which so vitally affect the development of population follow the lines of any social order of these kinds. We have therefore to treat castes individually or in small combinations framed in each case according to the purpose for which they are to be used and any large combination either for the purposes of the return in the schedule or the tabulation of the figures is impossible. There are however perhaps three large divisions of the Hindu social system which it would be possible and useful to make. The Brahman community occupies a prominent position in most provinces and the figures of Brahmins should

*Castes have been tabulated by their traditional occupations in some of the Provincial Reports, but in others, e.g., Madras, this classification has been deliberately abandoned for the reasons given in the text. No figures of this kind could be supplied for the all-India Report.

be fairly complete. At the other end of the society there lie a number of tribal groups which together are sometimes termed the "depressed classes." If we could obtain figures for these two extreme divisions we could by subtraction mark off the intermediate castes as "non-Brahman castes."

193 It has been usual in recent years to speak of a certain section of the community as the 'depressed classes.' So far as I am aware the term has no final definition nor is it certain exactly whom it covers. In the Quinquennial Review on the progress of education from 1912 to 1917 (Chapter XVIII paragraph 505), the depressed classes are specifically dealt with from the point of view of educational assistance and progress, and in Appendix XIII to that Report a list of the castes and tribes constituting this section of the community is given. The total population classed according to these lists as depressed amounted to 31 million persons or 19 per cent of the Hindu and Tribal population of British India. There is undoubtedly some danger in giving offence by making in a public report social distinction which may be deemed invidious, but in view of the lists already prepared and the fact that the "depressed classes" have, especially in South India, attained a class consciousness and a class organization, are served by special missions, "raised" by philanthropic societies and officially represented in the Legislative Assemblies, it certainly seems advisable to face the facts and to attempt to obtain some statistical estimate of their numbers. I therefore asked Provincial Superintendents to let me have an estimate based on census figures of the approximate strength of the castes who were usually included in the category of "depressed." I received lists of some sort from all provinces and states except the United Provinces, where extreme delicacy of official sentiment shrank from facing the task of attempting even a rough estimate. The figures given are not based on exactly uniform criteria, as a different view is taken of the position of the same groups in different parts of India, and I have had in some cases to modify the estimates on the basis of the figures in the educational report and of information from the 1911 reports and tables. They are also subject to the general defect, which has already been explained, that the total strength of any caste is not recorded. The mar-

<i>Depressed Classes</i>	
	000 omitted
Total	52,080
Assam	2,000
Bengal	8,000
Bihar & Orissa	8,000
Bombay	2,800
C P & Berar	7,300
Madras	6,372
Punjab	2,893
United Provinces	9,000
Baroda	177
Central India	1,140
Gwalior	500
Hyderabad	2,330
Mysore	932
Rajputana	2,267
Travancore	1,200

60 millions in India proper. Of the degree and nature of their impurity it is not necessary to speak here. It varies in different tracts and is most conspicuous in Southern India where, perhaps owing to more settled political conditions, orthodox Hindu sentiment has been able to develop an intensity of social differentiation which the more complex conditions in Northern India would somewhat tend to modify.

In paragraph 170 of his chapter on Races and Castes Mr. Grantham (Burma) gives an interesting account of certain small indigenous groups of people who may be described as forming "depressed classes," in the sense that they are degraded below the level of the rest of society. Reference must be made to the Burma Report for particulars of these groups. They include the Sandalas or grave diggers, who live outside the villages, the Payakyun and Khwa, who are pagoda slaves, the Thinchu, descendants of a certain Arakanese general and his followers, who rebelled against the King of Arakan and were condemned to everlasting social degradation, the Kebas who are hereditary beggars and the Don (fishermen), Hari (sweepers) and Hara (washermen). The last three groups are of mixed Hindu descent and with others of the same kind take their place as low caste Hindus. Of the other indigenous groups Mr. Grantham, while admitting certain social disabilities such as restrictions in inter-marriage and commensality, considers that their degradation is to some extent economic and hardly corresponds to the condition of the impure castes in Hindu society. Of the 480,000 Hindu and tribal Indians enumerated in Burma a large proportion are members of or descendants from impure groups of people in Southern and Eastern India.

and Forest
Races.

194 This group has been distinguished in previous censuses and contained such tribes as the Nagas, Aboms of Assam, the Garos of Bengal, the Ormons, Mundas and Santals of Bihar and Orissa, the Gonds and Kewars of the Central Provinces, the Bhils of Central India, the Todas of Madras and so forth. It is, however, difficult to isolate a group of this kind since as the country opens out, these people leave their native forests and hills for the attraction of the plains, where they settle down and adopt the habits, language and occupation of their Hindu or Hinduized neighbours. This has happened with large numbers of the Gonds, Bhils, Santals and others whose religion and language have as we have already seen, been Hinduized and there is no scientific reason to distinguish this section of the tribes from other similar peoples who have gone through much the same process at an earlier date. It is not therefore possible to give accurate numbers of the tribal aborigines, but the total number of those tribes who are still, or who have till recently been considered inhabitants of the hills and jungles, including such tribes as the Gonds, Santals and Ormons may be roughly put at something over 16 millions of persons. It is of interest to recollect in this connection that the number of those who returned a tribal religion is only about 9½ millions, thus leaving in the Hindu community between 6 and 7 millions of more or less recently Hinduized tribes.

Brahmans and non
Brahman castes.

195 The Brahmans form a fairly clearly recognizable unit in each province and are more or less completely returned. They number throughout India 14 millions a number which does not include groups such as barbers or goldsmiths whose ambition has impelled them to claim a kind of subordinate Brahman status. If we deduct from the total number of Hindus, viz., 217 millions (1) the number of Brahmans, viz. 14 millions, (2) the depressed classes, viz. 63 millions, and (3) the recently Hinduized tribes 6½ millions, we get a remainder of 143½ million persons, who may be roughly held to represent the non Brahman caste—Hindus of all kinds, including most of the cultivating professional and higher artisan groups and a certain proportion of the lower artisans and labourers.

Division of Bengal.

196 An interesting estimate of the class generally known as the Bhadrak of the Bengal Presidency has been made in the Bengal Report. The bulk of this class belongs to the Brahman Kayastha and Baidya castes which together number nearly three millions. The proportion of these in the population is high in Calcutta and the neighbouring districts of Western Bengal and in Chittagong and the Eastern Bengal districts. There is naturally a close correlation between the distribution of this class and the extent of literacy and especially of literacy in English and the figures of distribution which are possibly the result of political movements in early times give a good index of the local supply of clerical labour. Mr. Thompson remarks—

"There is some trace in the high proportion in such districts as Bakerganj and Chittagong of the fact that numbers of the better class Hindus were forced to take refuge in remoter parts during the times of Muhammadan supremacy as in the high proportions in Burdwan and Bankura there is trace of the fact that the Moghuls never subdued those parts as they did Eastern and Central Bengal. The Moghuls cannot be held responsible for the low proportion of Bhadrak Hindus in Northern Bengal. The establishment of the Muhammadan power with its headquarters at Gour much earlier than Moghul times may have driven the ruling Hindu races from the neighbourhood of Malda, but the Muhammadans never established themselves in the north-eastern parts of the Rajshahi division, and we may conclude that those parts were not occupied by the Aryan invaders of India before Muhammadan times as effectively as the central and southern parts of the Province."

197 The question of the entry in the schedule of caste by Sikhs was the subject of special consideration in view of a resolution on the subject tabled in the Legis-

Caste	Persons who are Sikhs 1907 estimated	Persons age on total strength of caste
Jat	1,823	22.4
Chamars	163	14.3
Yarban	140	22.7
Arora	121	16.6
Kamboj (Kamboj)	84	43.2
Rangpuria	64	87.2
Machhi	64	86.6
Khatti	62	72.6
Mahajan	62	67.9
Mahar	62	42.2
Jafar	42	72.2

lative Assembly but subsequently withdrawn, in which objection was taken to the enquiry of their caste from Sikhs. In the Punjab and North-West Frontier Province orders were eventually issued that Sikhs who were unwilling to return their caste should not be pressed to do so. The incident stresses the growing corporate feeling among certain of the Sikhs with whom, partly under political influence, communalism temporarily at any rate superseding sectional sentiment though as a matter of fact, a large number still strongly insist in the social distinction of caste and

retain the practice of endogamy. In 1911 of the 2,884 thousand Sikhs who were returned in the Punjab only 221 persons failed to specify their caste. On the present occasion the number is 67,000 or 2 per cent. But in the North-West Frontier Province no less than 54 per cent of the Sikhs were returned without caste. The chief castes returned by Sikhs in the Punjab are given in the margin on page 226. About one-third of the whole Jat community of the Punjab is Sikh by religion.

198 Islam recognizes no *caste* distinctions and among the Muhammadans of the north-west of India where the foreign strain is strongest, restrictions such as those of caste are not observed, interdining between tribal or even functional groups is usual and intermarriage common. In the rest of India however, the influence of Hinduism has powerfully affected Muhammadan custom, tradition and sentiment. The vast majority of the Muhammadans in India are the descendants of converts from Hindus and the Superintendent of the Punjab Census of 1911 estimated that only 15 per cent of the Muhammadans of the Punjab are of real foreign origin while in the rest of India the percentage of Muhammadans of foreign stock must be exceedingly small. Muhammadans are divided into four

Divisions of Muhammadans	Number 000's omitted
Mughal	302
Pathan	7,564
Saiyid	1,677
Sheikh	33,392
Others	29,820

large families Pathans, Moghuls, Saiyids and Sheikhs, and into sectional or functional groups such as the Boras, Khojas and Memons of Bombay and the Julahas and Kulus of Bengal, while large numbers of the higher Hindu castes in north India *e.g.*, the Rajputs and Jats have been converted to Islam. Although the distinction between section and section is much looser than in the case of the Hindu castes and it is the fashion to deny the existence of rigid partitions

between the various groups, yet there is a practical endogamy in the sectional and functional divisions and in Bengal a Sheikh will not marry a Kulu while in some parts one Muhammadan will not feed with another. Except perhaps in the case of the Moghuls and Pathans and of some of the well marked divisions in Bombay such as the Boras, Khojas and Memons and in South India such as the Mappillas, the figures for the various Muhammadan divisions are untrustworthy. The majority of Muhammadan cultivators in Bengal and Assam return themselves as Sheikhs but a Sheikh is very apt to become a Saiyid when he achieves wealth and position. On the other hand the functional groups are now largely abandoning their traditional occupation, and with it their traditional name, and calling themselves Sheikhs, while on the other hand some of the Sheikhs who resent this intrusion have abandoned the title and simply return themselves as Muhammadans. The principal Musalman castes of the Punjab are the Jats,

Religion	NUMBER PER CENT	
	Jat	Rajput
Hindu	19.3	27.7
Musalman	47.3	70.7
Sikh	33.4	1.0

Rajputs and Arains who together number over five millions. The Arain caste in the Punjab is almost entirely Musalman, the Jats and Rajput castes are divided between the three principal religions as in the marginal statement. The Pathans are divided into numerous tribes which are described in the census reports of the North-West Frontier Province and Baluchistan but the number of

unspecified entries is as high as 23 per cent in the former Province, and somewhat vitiates the tribal figures. Of the Brahmins of whom there are about 160,000, Major Fowle writes —

“The Brahmin origin is practically untraceable. It is not even clear whether they came from the West, from Persia like the Baloch, or from the East, in which case they would have brought their Dravidian language with them. At any rate once settled in Baluchistan, with Kalat as their capital, they had to hold their own against the other inhabitants, Pathan, Baloch, Jatt, etc., and a Brahmin military confederacy gradually arose. In course of time, however, as a need for such a confederacy decreased, particularly after the British occupation of the Province, the ties that held them together loosened one by one, disintegration set in, and at the present day the Brahmin are less homogeneous than even the Baloch. In fact in many cases the latter would seem to have absorbed elements of the former, who, when it suits, return themselves as Baloch instead of Brahmin. Sufficient signs of disintegration indeed were apparent in 1911 for Mr. Bray to write — ‘Taking one thing with another, I am forced to the regretful conclusion that unless the many disintegrating influences are arrested and some counter influence, such as the purging and strengthening of the Jirga system speedily arises to put new life into tribal and racial unity, the Brahmin tribes have seen their best days and that the

Brahui race is doomed in the future, let us hope the very distant future, to absorption into some more virile community. The figures, however, indicate that during the decade the process of disintegration has certainly not been actively at work. It is true that the Brahuia as a whole have declined but this decrease is distinctly less than that of the Pathans, and can be attributed to influenza, famine and migration, while the real Brahui stock—the Brahui nucleus—shows an actual increase.

The Mappillas who form the largest Muhammadan community of Madras, number in all 1 107 017 in the Presidency and Coorg. Of them Mr Boag writes—

The Mappilla who since the census has made himself notorious by his great rebellion is at home only on the West Coast. His numbers have risen by 6½ per cent. since 1911 and we have seen in Chapter IV that this increase is at least in part due to conversions from among the Cherumans. Originally descended from Arab sailors who married women of the country

the majority of the Mappillas to-day have next to no admixture of foreign blood except in few cases they are simply out-caste Cherumans who have turned to Islam in the hope of improving their social status, or the descendants of such converts. Their zeal for Muhammadanism is notorious, and their fanatical outbreaks have for years been the only source of disturbance to the peace and quiet of the West Coast. The recent outbreak, for the numbers involved, the area affected, the damage done to person and property public and private, and for its duration, has far surpassed all previous ones. Mappillas are found in every taluk of the district as will be seen from the figures in the margin. After the Laccadives, the three taluks of Kottai, Ponnai and Walluvanadi, in which they are most numerous form with Calicut taluk the area worst affected by the rebellion.

Taluk.	Mappilla population.	Percentage of Mappilla to taluk population.
Calicut	86,521	29.9
Chirakkal	80,307	24.0
Coimbatore	4,223	18.8
Kozhikode	224,872	59.1
Kottayam	44,790	23.6
Kurumbalangi	93,590	25.9
Laccadives	9,483	90.8
Pulicat	18,040	4.2
Ponnai	224,622	42.9
Walluvanadi	131,447	32.3
Wynad	12,523	18.1

Race in Burma.

199 A special study has been made of the races of Burma in connection with the Linguistic and Ethnological Survey of Burma recently carried out. The results are presented partly in the Burma Census report and its appendices and partly in the form of monographs on particular races, and the student is referred for details on the subject to these sources. It is only possible here to notice the main classification and the statistics of the principal racial classes. The chief racial divisions of the population of Burma are given in the margin. The bulk of the indigenous inhabitants are composed of a mixture, in varying degrees of the Indo-Chinese and Southern Mongol stocks the latter preponderating. The Southern Mongols both before and after their arrival in Burma split up into several sub-races, the Shans, Kachins, Talangs, Karens and others. These by intermarriage with one another and with the Indo-Chinese races have produced the various indigenous races of Burma. The Shans and Kachins, who inhabit the north eastern and northern tracts are well defined, as also the Chins of the Chin Hills in the north-east. The bulk of the Talangs of whom there are 2½ thousand and of the Karens belong to the Delta and coastal tracts of South Burma and have been largely assimilated with the Burmese. The Palaung Wa group belongs almost entirely to the Shan States.

Race	As numbers 1907 estimated.
Total	18,186
Indigenous Races	11,962
Burma Group & Talang	1,967
Chins	1,229
Tai (Shan)	1,718
Chin	229
Kachin	147
Palaung W	187
Others	147
Chinese	149
Indo-Burmese	129
Indians	897
Others	23

The Chinese were divided at the census into Yunnanese and Other Chinese, the former numbering 59 000 and the latter 90 000. The increase in the Chinese population in the last forty years is remarkable, the figures for the two Chinese races together being given in the margin. The majority of the Yunnanese are found in the Northern Division the other Chinese are most in the Delta and coastal tracts of South Burma. Practically every village in Lower Burma now contains a Chinese grocer and the Chinese are monopolizing a large portion of the rural trade of the country. The Chinese themselves are a heterogeneous racial character and a considerable number who come from Malaya are already of mixed race. They intermarry freely with the women of the country and in such cases the sons are brought up as Chinese while the daughters take the race of the mother.

Chinese	By race
1901	149 600
1911	1,223 341
1921	2,223 341
1931	41 774

The Chinese themselves are a heterogeneous racial character and a considerable number who come from Malaya are already of mixed race. They intermarry freely with the women of the country and in such cases the sons are brought up as Chinese while the daughters take the race of the mother.

Of the Indo-Burman races the *Zerbadis* with 93,000 form the minority the term being applied to the offspring of marriages between Indian Muhammadans and Burmese women. The Zerbadis wear Burmese dress and speak Burmese but the first generation and often later generations are bilingual speaking both Hindustani and Burmese. The term seems to have been first used in 1891 when 24 Zerbadis were recorded as of Buddhist religion. The total in 1901 was 20,423 and in 1911 nearly 60,000, the increase doubtless being largely due to greater accuracy as the name and class became more defined. The Zerbadis are predominantly Muhammadan and form a part of the Burma Moslem community which like most other communities is rapidly gaining a communal consciousness. Of the other Indo-Burman races the Aikan Muhammadans are practically confined to the Akyab district and are properly the descendants of Aikinese women who have married Chittagonian husbands. They number about 21,000 marry almost entirely among themselves and are recognized as a distinct race.

As many as 887,000 Indians were enumerated in Burma, the term Indian being used at this census to include all who describe themselves as belonging to one of the Indian races tabulated or who appeared from other parts of their record to belong to one of those races. Of those recorded about 184,000 were Hindus and Tribal, 366,000 Muhammadans and 23,000 Christians. The attempt which has been made in the past to enumerate the Indian population in Burma by caste has proved a failure. Many of the Indians on their arrival in Burma abandon their caste altogether others wilfully misrepresent their caste

while, in any case, the Burmese enumerator is quite unable to repeat correctly in the schedule the strange Indian caste names. On the present occasion the Indians were divided into certain divisions or classes which are intelligible and useful in Burma such as the Bengalis, Hindustanis, Orissas, Tamils and Telugus.

Indians in Burma classified by race

	MUHAMMADAN		HINDUS AND TRIBAL		CHRISTIAN	
	Male	Total	Male	Total	Male	Total
All Indian Races	603,939	223,637	370,579	101,423	217,639	110,671
Burmese	6,117	17,111	1,111	1,091	4,661	14,661
Chittagonian	1,111	1,111	1,111	1,111	1,111	1,111
Hindustani	1,111	1,111	1,111	1,111	1,111	1,111
Orissa	1,111	1,111	1,111	1,111	1,111	1,111
Tamil	1,111	1,111	1,111	1,111	1,111	1,111
Telugu	1,111	1,111	1,111	1,111	1,111	1,111
Other Indian Races	1,111	1,111	1,111	1,111	1,111	1,111

and the figures of the Indian population divided in this manner are given in the

derive their livelihood from cultivation, the main part are engaged in occupations claimed as Industry Transport and Trade, and consequently are either in the towns or close beside the railway and river routes. This is true even in the districts in which the Indians are proportionally most numerous and it is exactly such a location as must make them be seen most frequently by observers. Their share in transport and some other industries however is exaggerated in the occupational tables. Their share in the skilled occupations of industrial establishments is discussed in Chapter XIII they have not such a monopoly of these as is sometimes suggested, and in any case allowance has still to be made for the overwhelming preponderance of the indigenous race in agriculture. It is true that in certain localities a large area of paddy land has gone into the possession of Indians or is worked by Indians, but in view of the whole province the area is still small, and the problems involved are local. The last four articles preceding this have shown that the Indian question must be discussed separately for the near and the distant districts (or possibly for some divisions of the province differing slightly from those). In the distant district the proportion of Indians is still only 1 in 18 of the population and it has grown by about 10 per cent. in the last decade instead of the 13 per cent. shown by the preceding decade. How far this falling off is only due to a falling off of the number of Indians leaving India to come to Burma and how far it is due to special losses of Indians through influences is uncertain. But it seems clear that the power of a foreign immigrant population to displace the indigenous population must depend chiefly upon the number of the foreign women who come to settle in the country. Indian females have increased from 1.9 per cent. of the female population in 1901 to 3.5 per cent. in 1921 while in the distant districts less than half the Indian females of 1921 were born in Burma. Even a single homogeneous immigrant race of which this is true is far more likely to be absorbed than to displace. Exceptional results might come if the immigrants consisted chiefly of the highly educated or skilled classes or of financially powerful classes but while the Indians include all these it cannot be said that the majority of them come under these descriptions. And the Indians of Burma are far from belonging to a single homogeneous race. The 2.5 per cent. or 25 per mille of the female population of the distant districts which is Indian is distributed amongst a number of religions and races. Putting aside those which claim only a few persons, there are three religions and three races which share with large numbers. Whether the tie of race or religion is regarded, the proportion to a thousand of the total female population is small for any unified class. The proportions have certainly been increasing. But this too has been due partly to the peculiar age-distribution of the indigenous Buddhist population, which has caused the Buddhists to have a particularly low rate of increase just when the Indians of Burma had a natural rate of increase above their average.

Mr Grantham goes on to show the penetration of Indian influence into Burma in historical times.

The common view therefore that the Burmese are in danger of losing their country to the Indians is not new but goes back at least 800 years and it is not unreasonable to ask for special evidence that a displacement which went on so slowly through these centuries when the indigenous races were absorbed in intermarriage still is going to have lightning effect now. On the other hand the last thirty or forty years have seen the indigenous races spreading out to reclaim to cultivation the jungle of the delta, the colonisation of which with its difficulties of fever flood and finance is a feat that has not always been fully appreciated. Now it has been recognised that a complete development of the economic life of the province must be balanced and that if the indigenous races are to retain their place they must take part in the larger industrial and commercial enterprises as well as in agriculture and in trade and industry on a small scale. One of the Burmese leaders expressed this in 1922 as follows:

The economic menace is imminent and unless we are prepared to repel it our national existence is doomed. If we start organising ourselves from now and learn and strive diligently to get the control of the trade, commerce and industry of the country into our hands we may yet be saved. The principal difficulty in this seems to be the lack of financial credit but the recent developments in which Burmese have joined in industrial enterprises may establish this for them if they make it their aim and sacrifice minor gains for it. The provision of banking facilities in the largest towns, which is involved in this need but does not constitute the whole of it, has been recognised as an urgent desideratum and it is hoped that a beginning will soon be made. To a nation alive to the conditions the present numbers of Indian and their rate of increase is no more. There will be room for them always. But while the Indians multiply come to Burma and work for the advantage both of themselves and of Burma, there are at present no signs that they will within any reasonable time displace the Burmese and convert Burma into an Indian colony. Those who come only for a short time cannot do this; those who stay will tend to be absorbed as they are being absorbed now. By their absorption they will of course influence Burmese development as they have always done but the essential character of the country must remain Burmese.

200 The main figures of Europeans and Anglo-Indians are given below, the regional details will be found in the table at the end of the chapter

Province State or Agency	Number of persons born in Europe America and Aus tralia		Table XVI. European and Allied Races in 1921					Anglo-Indians	
	1921	1911	British Subjects	Others	Total	Total European and Allied Races in 1911	1921	1911.	
India	125,869	133,692	163,918	10 139	174,057	187,639	113,012	100,420	
Provinces	113 450	120 770	149 520	9 124	157 649	178 130	90 529	80 106	
States and Agencies	12 414	12 916	15 393	1 015	16 403	10 509	16 483	14,224	

The details of the European community are best studied in connection with birthplace and have been partially dealt with in Chapter III. The actual figures of Europeans and of the "Anglo-Indian Domiciled Community" are always somewhat doubtful, owing to the tendency of the latter to return themselves as European and of Indian Christians to claim to be Anglo-Indians. In Calcutta European enumerators were employed wherever possible for quarters where Europeans or Anglo-Indians were in considerable numbers and this plan undoubtedly produced greater accuracy in discriminating between Europeans, Anglo-Indians and Indian Christians in Calcutta city. Apart from difficulties of classification the variation in the number of Europeans depends, as has already been explained, principally on the movements of troops and of officials in and out of India. The Anglo-Indians are much more concentrated than the Europeans, the bulk of the community being found in the large cities and railway centres and industrial and mining areas. Like other distinct sections in India the Domiciled Community have greatly improved their communal organization of recent years and are now represented on the Indian Legislative Council.

201 The scientific aspects of caste have been fully discussed in the caste chapters of the last two India census reports. Caste is too localized and the figures unfortunately too incomplete to admit of a discussion in a report for all India of the statistical variations of individual groups and the student is referred for such treatment to the Provincial reports. The census staff is, however brought into close contact with the practical features of caste in every-day life and it may be of interest to discuss some of the main impressions regarding the present-day tendencies and developments of caste which were formed in the course of the census operations. In dealing with the question of the method and accuracy of the caste return we found a strong movement among castes to claim a higher status and better their social condition and a multiplication of caste *sabhas* or associations. So far, in fact, from there being any sign of the disappearance of caste feeling the strong impression, which the processes and results of the census give, would be that there is a growing caste consciousness, accompanied by a feeling of caste patriotism on the one hand and on the other with, in some cases, intense caste jealousy and antagonism. Political rivalry among certain groups especially in South India, has undoubtedly enhanced the communal spirit on its social as well as its religious side, and the popular attitude towards the census enumeration there made it clear that there was in South India no sign of a weakening of caste feeling. This communal consciousness and jealousy, especially where it is accompanied by an ambition to rise in the social scale, often finds expression in an exaggerated observance of the orthodox traditions associated, or supposed to be associated, with the higher castes, *e.g.*, infant marriage, the restriction of widow re-marriage and a rigid endogamy. On the other hand some of the caste associations have directed their energies to social reform of a real character. The Census Superintendent of Bihar and Orissa dealing with the growth and character of these caste *sabhas* instances that of the Ahir caste —

"But the most important and effective *sabha* in the province is probably the Gope Jatiya Maha Sabha of the Goals or as they prefer to call themselves Ahirs, founded in 1912 and including members from the whole of the north of India from the Punjab to Bengal. The movement which it represents is described as a "Pan-Ahir movement", sessions are held once a year and are attended by several thousands of persons. The association also has a monthly journal of its own called the *Ahir Samachar* published at

Mainpuri in the United Provinces. A considerable body of literature has accumulated in support of the claim of the Ahirs to Kahatriya origin and it is stated that nothing less than Kahatriya position will satisfy the community. In pursuance of this theory a number of Ahirs have assumed the sacred thread. This action on their part was originally resented, particularly in North Bihar, by the higher castes such as the Rajputs and the Bhumihsar Brahmins and led in some cases to violence and the criminal courts. The Ahirs have also reduced the thirty days *sradha* or funeral ceremony prescribed for the Sudras to the twelve days of the twice-born. The resolutions of this *sabha* also are directed against the drinking of liquor, child-marriage and such like.

In South Bihar the Gola movement has been less in the direction of advancing caste claims to wear the sacred thread and so forth and more towards social reform. The men of this caste refused to do *bepari* (customary unpaid labour) for their landlords or to permit their women folk to attend the markets to sell milk and *ghe*; this has on at least one occasion resulted in temporarily dispossessing a bazaar and in causing serious inconvenience to their neighbours. The different sub-castes of Ahirs are now dining with one another and inter-marriage between them is almost settled. This movement is typical of what is going on in other castes. The Kurmas, the Kahars, the Dhanuks and others are claiming the right to wear and are in some cases wearing the sacred thread. Not that this attitude finds universal favour even amongst the aspiring castes for a case occurred in Monghyr district in which a Dhanuk who had assumed the sacred thread found that he had thereby deprived himself of the chance of marrying his children into the family of a wealthy caste fellow of more conservative views.

Again many influences make for the relaxation of the less essential rules of caste in order to bring the system into adjustment with modern conditions. Mr Mukerjee (Baroda) notices that the restrictions of commensality within the different sub-divisions of a caste, even between caste and caste, are fast breaking down in cities and towns "and Mr Tallents writes —

"The most important aspect of caste is the system of restrictions on marriage which it imposes and neglect of caste distinctions in this matter is unheard of. As between sub-castes within the limits of the same caste there are signs of relaxation, notably amongst the Kayasths who are the most highly educated caste in the community. Cases of this kind have occurred amongst the Bihari but more particularly amongst the domiciled Bengali Kayasths, where a rapprochement has occurred between the Dakshin Barchi and the Uttar Barchi and Bangas sub-castes. The same thing has been occurring in Orissa between the Basanti and Mariani sub-castes of Brahmins and the Basanti Brahmins and the Chaudhuri family of Bhungarpar. Such incidents however which have only been noticed amongst the upper and more educated caste or castes that are aspiring to the upper ranks, are to be regarded not as signs portending the collapse of the caste system but of its adjustment to modern conditions. The same may be said with regard to modifications of the rules about personal contact or the touching of what is eaten or drunk. Amongst the Hindu castes that served overseas in the war, the purification ceremony necessary after crossing the ocean has apparently become purely nominal only one case that arose in connection with the war that of some Kayasths of Darbhanga, is mentioned by correspondents in which the necessity for such a ceremony gave rise to any discussion and that case was amicably settled. In places like Jamshedpur where work is done under modern conditions, men of all castes and races work side by side in the mill without any misgivings regarding the caste of their neighbours. But because the facts of every-day life make it impossible to follow the same practical rules as were followed a hundred years ago it is not to be supposed that the distinctions of pure and impure, touchable and untouchable, are no longer observed. A high caste Hindu would not allow an untouchable to sit on the same seat or to smoke the same hookah or to touch his person, his seat, his food or the water he drinks for a breach of this rule a bath in cold water is the minimum purification prescribed. Within the last ten years the children of the untouchable classes attending one of the Zilla schools in this province were made to sit in the verandah and it was found necessary to make the grant of allowances for such children strictly conditional on their being given equal facilities for instruction with the other children. There is indeed little to show that the rules of touch are falling into disuse except in so far as they have become incompatible with the routine of every-day life. At railway stations no questions are asked with regard to the caste of one's fellow passengers or the railway porters who handle one's baggage but the man who supplies drinking water to thirty passengers is still (except in parts of Chota Nagpur) a Brahmin."

The loosening of caste bonds is confined to the less essential ordinances. Inter caste marriages are still rare and are usually celebrated by special mention in the journals devoted to social reform. Experience in the census operations showed that the higher castes were exceedingly tenacious of their exclusive rights and enumerators belonging to acknowledged Brahmin, Kahatriya and Kayastha groups had no sympathy with the pretensions of lower castes. In Bengal a conservative Brahmin enumerator put his feelings very plainly into words when he said he would rather cut off his hand than write down a Jugli as Jogi

and his wife with the title of Debya like a Brahman woman " Mr Lloyd (Assam) writes —

" I have received communications from several correspondents as to the trend of the caste system and the influence of it on modern thought. The general conclusion is that culture and wealth are the only ladders by which the castes on the ground floor may hope to climb to an upper storey, and when they have climbed they do not attain to religious equality or to commensality. Their promotion is restricted to their being allowed to sit down in presence of the exalted ones and to converse with them. This of course applies also to members of other religions when mixing with Hindus. The difference is that the Muhammadan or Christian will be at ease and will behave and be treated as an equal in conversation with his Hindu friends, while the Hindu of lower caste, even when highly educated, will still be in a subconscious state of sitting on the edge of the chair in presence of a man of higher caste. Signs of change in the practices of endogamy, exogamy, and hypergamy can hardly be noticed among the Hindu castes, and only isolated cases of departure from previous practice have been brought to notice. A writer has stated that caste tribunals in India are losing their value and that their edicts of excommunication are treated with contempt in some castes, the excommunicated persons and their friends forming a separate sub-section. The criticism hardly applies to Assam as yet. In some places the power of excommunication as a weapon has been demonstrated and revived by the non-co operation movement as a punishment not for breaking caste laws, but for disagreement from the political views of a majority or of a dominant and claimant minority. No tendency to the formation of new castes by separation of functional sub-castes is visible. Rather is there a general tightening up of the caste bond within the ranks of each of the lower-placed castes, manifesting itself in the adoption of new names and a general desire to appear as cultivators rather than as followers of any of the other traditional pursuits. These remarks, of course, do not apply to the unorthodox and the more unselfish of the educated classes. Among Animist tribes conversion to Hinduism as in previous years results in the giving up of some old practices and the retaining of others. Kacharis who enlist in the Assam Rifles or Armed Reserve Police naturally find it improves their status with their fellow sepoys—largely Gurkhas—to be Hindus. They often abandon old practices such as the eating of pig's flesh and drinking of beer, but not others. The effect of conversions to Christianity has been, in some cases, to react on the polity as well as on the individual. And this reaction is not always for the better. For instance, among the Ao Nagas, where the education of girls is carried on by the American Baptist Mission, the conservative members of the tribe complain that an educated girl will not work in the fields and that consequent idling in the village has increased immorality. Again the Subdivisional Officer of Mokokchung reports that the Mission teachings tend to undermine the structure of the tribe. Each Ao village is governed by a council of elders, some of whose functions are religious, and Christians often refuse to serve on the councils. In time the tribe may thus be left without a proper social organization."

There is no doubt that where Hindus are brought in close daily contact with a people who are without caste there is a very strong tendency for the caste feeling to relax. There is practically no caste among the Hindus resident in Baluchistan and of those in the North-West Frontier Province the Census Superintendent writes —

" Surrounded as they are by non-Hindu population, the Hindus and Sikhs in this Province are not a little influenced by the social freedom of their Musalman neighbours. Caste restrictions among them, already lax, have considerably weakened during the last decade. Education is a great disintegrating factor. Political, religious and economic influences have all more or less affected the rigidity of the caste institution. Reform movements like the Arya Samaj and Singh Sabha have done not a little to free the popular mind from caste prejudices. That the restrictions of caste are fast dying out is obvious enough. The present Hindus and Sikhs may be divided into three sections, *viz*, (1) the orthodox who follow the caste system, more or less strictly, (2) those who have ignored the restrictions of interdining, but still adhere rigidly to the limitations prescribed for marriage, and (3) those who have given up both. Although the orthodox portion of both these communities is still in majority, their numerical strength is being reduced with every year that passes. A considerable proportion observe no restrictions of interdining, and although the number of those, who have freed themselves altogether from caste shackles, is small, the time spirit is with them and they are increasing slowly but surely. A small number of Aryas and as many as 54 per cent of the total population of Sikhs have refused to name their caste. There is a strong tendency to widen the endogamous groups and narrow down the exogamous circle. Endogamous groups of the same main caste, like Utradhis and Dakhnas among Aroras, are beginning to intermarry. In the matters of breaking down caste shackles Sikhs are far ahead of their Hindu brethren, and the Anand Marriage Act passed for their benefit has facilitated intermarriage between groups which had hitherto been endogamous."

SUBSIDIARY TABLE II.

Statistics of Europeans and Anglo-Indians.

Province, State or Agency	NUMBER OF PERSONS BORN IN EUROPE, AMERICA AND AUSTRALIA *		TABLE XVI. EUROPEAN AND ALLIED RACES IN 1921				ANGLO-INDIANS.	
	1921	1911	British Subjects	Others	TOTAL	Total European and Allied Races in 1911	1921	1911
1	2	3	4	5	6	7	8	9
INDIA.	125 869	133 692	163 918	10,139	174,057	197 839	113,012	160 420
Provinces	113 455	120 776	146,525	9,124	157 649	178,130	96,529	86,196
Ajmer-Merwara	1 118	1 287	1 400	42	1,442	1 755	746	710
Andamans and Nicobars	144	167	200		209	251	25	78
Assam	1 860	1 574	2 669	99	2 768	2,230	491	475
Baluchistan	4 189	3 378	4 754	3	4 757	4,210	234	123
Bengal	14 107	14 090	20 016	2 714	22,730	25 451	22,260	19 833
Bihar and Orissa	3 687	2,067	5 745	601	6,346	6 316	4 134	3,405
Bombay†	22,409	22 314	29 474	2 415	31 889	30 579	10 465	9 144
Burma	7 208	8 896	7 828	837	8 665	13 443	16 688	11,106
C P and Berar	4 598	5 333	5 627	265	5 892	7 333	3,574	3 468
Coorg	90	99	94	62	156	207	47	138
Madras	6 399	8 238	9 950	886	10 836	14 905	23 492	26 023
N W F Province	9 727	4 945	10 453	20	10 473	5 741	200	100
Delhi	2 048	24 260	4 317	53	4 370	32,278	417	3 479
Punjab	16 660		21 546	400	21 955		4 499	
United Provinces	18 163	23,218	24 443	718	25 161	33 411	9 267	8 094
States and Agencies.	12,414	12,916	15 393	1,015	16 408	19,609	16 483	14,224
Baroda State	86	82	80	23	103	159	44	82
Central India (Agency)	2,903	3 372	3 319	194	3 513	4,562	472	565
Gwalior State	584		540	80	620		260	
Cochin State	50	54	23	43	66	77	2 182	2,446
Hyderabad State	3 680	3 983	3 503	187	3 690	5 384	2,237	3,004
Kashmir State	167	137	263	7	270	251	46	17
Mysore State	4 162	4 373	6 636	265	6 901	7 463	6 778	5 827
Rajputana (Agency)	401	550	804	36	840	1 170	641	529
Sikkim State	11	14	7		7	14		4
Travancore State	371	321	209	160	369	400	3 821	1 750

* Includes New Zealand and Tasmania

† Excludes Aden

NOTE—The figures for Provinces are inclusive of the States attached to them except in the case of Madras where they exclude Cochin and Travancore.

CHAPTER XII

Occupation

Section I—Method of Enumeration and Classification.

Method of the Census
by occupations.

202 The present chapter deals with the occupational distribution of the peoples of India. In point of interest and importance the statistics of occupations are perhaps the most valuable of all those obtained at a periodical census. At the same time they are undoubtedly the most difficult to collect with accuracy and to compile with precision. The information regarding occupations obtained from the population census is contained in three columns in the schedule, columns 9 10 and 11 containing respectively the primary occupation of workers, the secondary occupation of workers and the means of subsistence of dependants. These columns have gradually obtained their present shape as the result of experience and the history of their evolution is given in detail in the report of 1911. Information about occupations was first tabulated in the Census of 1881 when only the occupation of workers was returned. In 1891 it was decided to record means of subsistence rather than occupation and workers and dependants were included without distinction. The present practice of distinguishing workers and dependants was introduced in 1901 and has since been maintained. The category of workers includes not only persons who work for their living but those who live on rent or on income from investments or on pensions or annuities. The dependants are the women, children and the old and infirm who rely on others for their support and whose occupation, if they have any is not sufficiently important materially to augment the family income. The main instructions issued for filling up these columns were as follows —

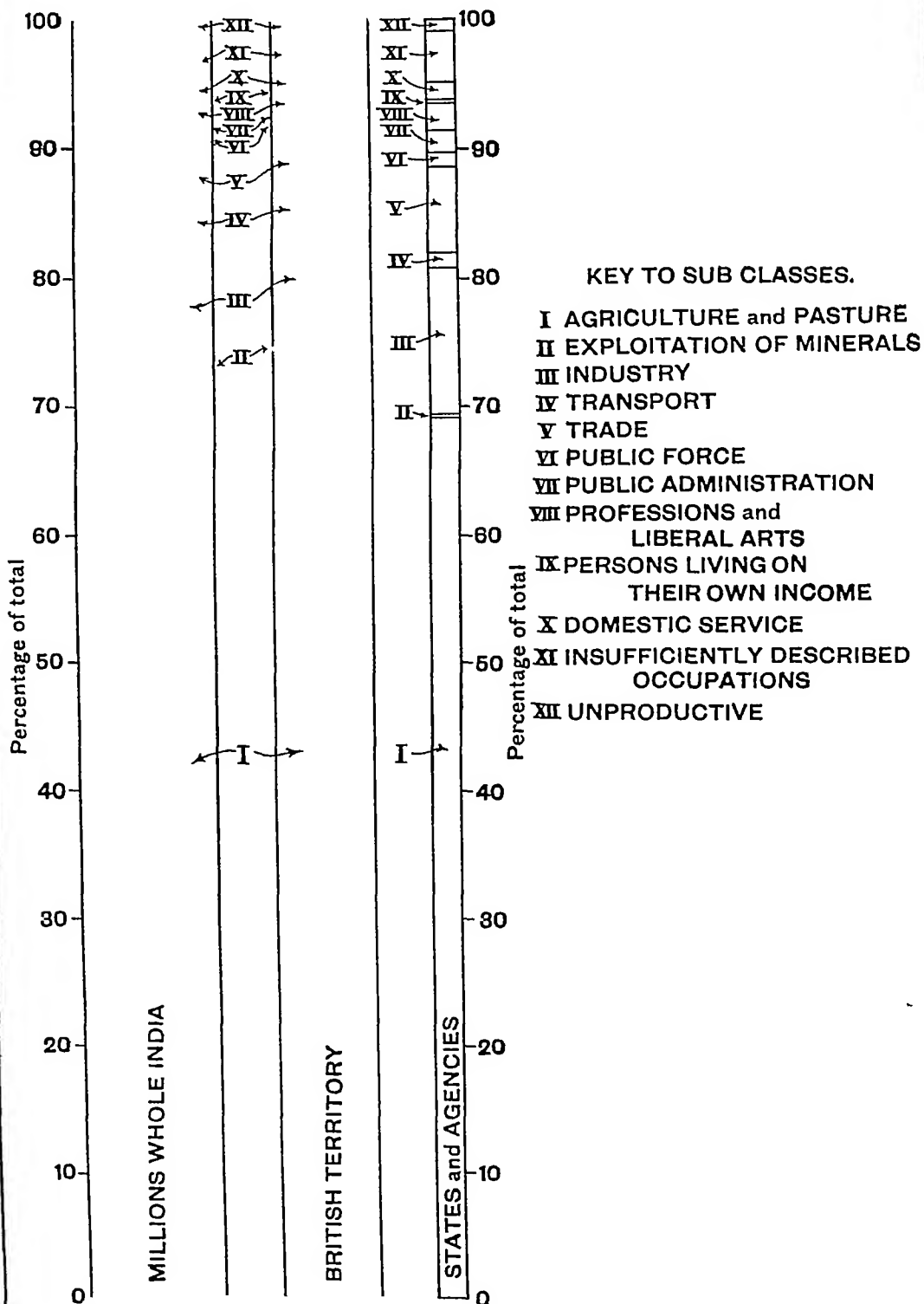
Column 9—Enter the principal means of livelihood of all persons who actually do work or carry on business, whether personally or by means of servants, or who live on house rent, pension, etc.

Column 10—Enter here any occupation which actual workers pursue at any time of the year in addition to their principal occupation.

Column 11—For children and women and old or infirm persons who do not work either personally or by means of servants, enter the principal occupation of the person who supports them.

The more general instructions were reinforced by special directions enjoining the avoidance of equivocal terms, the distinction between cultivators and those who subsist on the rent of agricultural land, the differentiation of manufacturers and traders, of labourers employed in different forms of labour of Government, municipal and private servants and the like and they were illustrated by examples of cases likely to present difficulties or ambiguities. In view of the difficulty of obtaining an accurate return of occupations it was directed that special attention should be paid to the entries in these three columns by the officers whose duty it was to instruct the staff and check the schedules. In spite of every effort to obtain correct entries it is probable that the occupations statistics are in some ways the least satisfactory part of the Indian Census owing to the difficulty in making the enumerators understand the instructions. The distinction between worker and dependant and between primary and subsidiary occupations involves subtleties of interpretation which continually gave trouble in individual cases and the extent to which the occupations of the women and children actually contribute to the income of the family must always be a matter of opinion and give rise to inconsistencies in the return. The most frequent and most disconcerting inaccuracy however is the return of general terms such as labourer, clerk, business, shopkeeper and so forth which give information so inadequate as to preclude exact classification. There has, however undoubtedly been a general improvement in this respect on the present occasion amounting, as compared with 1911 to a decrease by 43 per cent. in one of the larger provinces, and in another by an even larger proportion, in the number of such inadequate general terms. Having obtained as complete a return as possible in the schedule the various clerical processes of converting these returns into correctly classified tables require constant supervision and check at

DIAGRAM showing the DISTRIBUTION of the POPULATION by OCCUPATIONS, INDIA, 1921



The width of each column is proportionate to its population (316, 247, 69 millions)

The vertical areas are the percentages of each occupation to the total population concerned

This diagram is for Workers and Dependants combined, both sexes combined

every stage Assistance was given both in the enumeration and in the tabulation stage by the issue of indexes of occupations, carefully compiled in the light of the experience of previous censuses On the whole the general opinion of the Superintendents is that a reasonable standard of accuracy has been attained and that the tables of occupation may be accepted as a fair indication of the functional distribution of the people

203 It can hardly be said that a scheme of classification entirely suitable to Indian conditions has yet been devised In 1881 the English scheme was adopted with a few minor modifications, but it proved unsuitable to the conditions of India and an entirely new scheme was devised and substituted in 1891, which included in all 478 groups This scheme was amplified and expanded in 1901 with the result that the number of groups rose to 520 Experience in the classification offices, however, showed that attempts at elaborate classification were beyond the capacity of the Indian returns and the results were incommensurate with the cost and labour spent on them In 1911 a complete revision took place and a new scheme based on a system devised by Dr Jacques Bertillon and approved by the International Statistical Institute was introduced, consisting of four classes, twelve sub-classes, fifty-five orders and 169 groups This scheme, the method and detail of which is set out in the report of the 1911 Census, has since been subjected to a considerable amount of criticism and is undoubtedly susceptible of further improvement The question of adopting a uniform scheme of occupational classification for the Empire was considered at the Statistical Conference held in London in January, 1920, and a draft founded on Mr Bertillon's classification was eventually circulated It was not however deemed desirable again to break the continuity of the Indian method by a further elaborate revision, especially as in its general outline the Indian scheme, with the much greater simplicity which experience shows is necessary, sufficiently resembles the system recommended to enable general comparison to be made in the larger categories of the figures The system followed at the present census is practically the same as that of 1911, but opportunity was taken to introduce modifications where the classification appeared obviously defective The Bertillon scheme, as adopted for the Indian Census, was elaborately explained in the report of 1911 and it will be unnecessary to deal with it again in detail

Class.	Sub class	
A. Production of raw materials	I.—Exploitation of animals and vegetation II.—Exploitation of minerals	four classes and twelve sub-classes are given in the margin and under these main heads are ranged fifty-six orders and 191 groups A slight alteration has been made in the orders so as to admit of the introduction of "Transport by Air" and "Air Force," and the number of groups has been increased by twenty-two by the expansion of certain of the
B Preparation and supply of material substances.	III.—Industry IV.—Transport V.—Trade.	
C Public administration and liberal arts	VI.—Public force. VII.—Public administration. VIII.—Professions and liberal arts	
	IX.—Persons living on their income X.—Domestic service	
D Miscellaneous	XI.—Insufficiently described occupations XII.—Unproductive	

old groups so as to show separately important categories which had previously been combined, *e.g.*, different kinds of textiles, mechanical transport drivers, beggars, prostitutes, etc Some rearrangement of detail was also made by the transfer of categories which appeared to have been obviously wrongly classified At the same time considerable latitude was given to Provincial Superintendents further to amplify the scheme by the addition of sub-groups while preserving the standard frame-work As it stands the design aims at an industrial classification of occupations, the personal occupation being ranged in the scheme according to the nature of the work or the purpose which it serves Thus clerks, contractors, coolies, engineers, mechanics and so forth were allocated as far as possible to their respective industries, and order 53 (general terms which do not indicate a definite occupation) was only used in cases where the entry in the schedule was too vague to admit of more exact classification The following note* explains the main principles of classification

- "(1) Where a person both makes and sells, he is classed under the industrial head, the commercial one is reserved for persons engaged in trade pure and simple On the same principle, when a person extracts some substance, such as saltpetre, from the ground, and also refines it, he is shown under the mining and not under the industrial head

* Taken from the 1911 Report.

(2) Industrial and trading occupations are divided into two main categories —

- (a) those where the occupation is classified according to the material of which the articles are made and
- (b) those where it is classified according to the use which they serve. As a general rule, the first category is reserved for the manufacture or sale of articles the use of which is not finally determined but it also includes that of specified articles for which there is no separate head, and also the occupations, so common in India, which are characterized by the material used rather than the particular articles made. The ordinary village *walks* for instance makes not only boots, but also waterbags and all other articles of leather which he tans himself.

(3) As a general rule, when a man's personal occupation is one which involves special training e.g. that of a doctor, engineer, surveyor etc., he is classed under the head reserved for that occupation, irrespective of the agency by which he is employed. A ship's doctor for instance is shown as a doctor and not as a ship officer. An exception is made in cases where the work in which an individual is employed involves further specialization, e.g. that of a marine or sanitary engineer. Only those Government servants are shown in sub-class VII who are engaged in the general administration. Officers of the medical, irrigation, opium, post office and other similar services are classed under the special heads provided for these occupations.

As a further means of facilitating the classification of the entries recorded in the schedules and of maintaining uniformity of procedure an elaborate alphabetical index of occupation was prepared and circulated to all Provincial Superintendents for the guidance of their staff."

Industrial
census.

204 The occupational statistics collected in the population schedule give at best only a general sketch of the functional distribution of the people and are too vague and imperfect to afford the detailed information required for public and administrative purposes. Owing to the large area of the country, the scattered nature of the industrial concerns and the expense and difficulty of training a staff for the purpose it is not at present possible to hold in India anything like the complete industrial census which is held in some European countries. At the same time it was thought that some effort should be made to obtain, on the occasion of the general census, such information regarding the personnel employed in organized establishments and the power used as is possible and in 1911 a beginning was made by my predecessor by the issue of a special industrial schedule to be filled up by managers of industrial establishments containing twenty or more employés, in which were entered particulars regarding the number and class of owners, managers, the supervising and clerical staff and the skilled and unskilled labour employed in the concern and the particulars of the power used. The information so derived was found to be of considerable utility and on the present occasion, in consultation with the Industrial Department, the scope of this special census has been extended and the questionnaire amplified. The definition of "industrial establishment" adopted for the present census is as follows —

Industrial establishment for the purposes of this schedule means any premises wherein, or within the precincts of which, ten or more persons are employed on separate remuneration in any process for making, repairing, ornamenting, finishing or otherwise adapting to use for transport or for sale any article or part of an article. It does not include such industries as are carried on by members of a household in their joint interest with less than ten hired labourers.

The enquiry was therefore extended to establishments containing ten or more employés and the object of this definition was to include any establishment of the nature of a factory whether power is employed or not where labour is concentrated under a definite management and paid by definite individual remuneration and to exclude cottage or family industries where the work is done in the house by members of a family and profits are shared in the family. On all such industrial establishments two forms were served, in the first of which information was sought regarding (1) the nature of the business, (2) the number, sex and race or nationality of the owners or in the case of a company of the directors (3) the race or nationality of the manager (4) the number and sex of the supervising technical and clerical staffs, distinguishing Europeans and Anglo-Indians from Indians and other Asiatics, (5) the number and nature of the power engines, (6) whether the industry was perennial or seasonal and (7) the number of looms in textile establishments. The second return related to the labour force i.e., to operatives, skilled and unskilled, including foremen, mates and *shulkaddams* who are of

the same general class as the operatives under them. With regard to every such person information was requested regarding (1) name, (2) sex, (3) age, distinguishing adults from children of under 14 years of age, (4) race or caste, (5) birth district, (6) whether skilled or unskilled and (7) in the case of skilled operatives, the occupation. These forms were placed in the hands of the agents or managers of all establishments at least a month before the date fixed for their return which differed in different provinces but was usually some date in March or April 1921, selected so as to give a return which should as nearly as possible show the normal working population of the concern.

The accuracy of the information so obtained depends entirely on the amount of interest taken in it by the heads of the industrial concerns. In Burma the schedules were in the first place carelessly and imperfectly dealt with and practically all cases had to be returned with further instructions and completely rewritten. The Census Superintendent of the United Provinces also thinks that there must have been considerable omissions especially of unskilled labour in the schedules, both because the period of the census occurred during the time of harvest operations and also because the enumeration was taken by a staff which was untrained in census work and took little interest in the business. On the other hand the Census Superintendents of Bengal and Bihar and Orissa, in both of which provinces there are large numbers of industrial concerns, are able to discuss the information derived from these schedules with some confidence in the accuracy of the return. The Census Superintendent, Assam, writes of this census —

“Much difficulty was found in filling up the schedules although district officers were able to help managers by the deputation of special men and we may consider the return as correct only in certain portions. As to numbers of employes distinction between children and adults and between skilled and unskilled, there are necessarily discrepancies, since dates varied somewhat and the judgment of managers differed as to ages of children and as to what constituted a skilled worker.”

These returns are further supplemented by information obtained from the Railway, Postal and Irrigation Departments of the persons employed in these departments at the time of the census.

205 A large number of persons have more than one occupation and an attempt has been made since 1891 to obtain information of dual occupations. The versatility of the Burman is almost proverbial and writing of the tribesman of the Baluchistan frontier Major Fowle remarks —

“Primeval man is the perfect jack-of-all-trades: his own butcher, baker, carpenter, blacksmith, house builder, boat builder and so forth. The Baluchistan tribes have, of course, advanced beyond the state of primeval man, but they have not yet reached that stage where specialization begins to make its influence seriously felt. In the course of a year a local tribesman may gain his livelihood in a dozen different ways. He cultivates his own patch of land, lends a hand to cultivate the land of his richer neighbour in return for a payment in kind, works as a casual labourer on the railway, calls himself a ‘Jamadar’ and provides road coolies for a labour contractor, indulges in a small trading venture down to Sind, and—with the proceeds—buys a few camels and hires them out for Government or other transport. He himself, if asked, will say that he is a *Zamindar*—this being the most aristocratic of local professions, but from the census point of view what occupation does he follow?”

Agriculture, which is the primary means of subsistence of 71 per cent. of the community, also forms a secondary occupation of many persons of the commercial, industrial and professional classes. There are dual occupations whose intimate association by nature or custom is a feature of Indian mofussil life, such as money-lending, shopkeeping and grain dealing, fishing and boatkeeping, sheep breeding and blanket weaving; cattle breeder and dairy farming, field labour and mill labour, while the cottage industries such as weaving, pottery, etc., are frequently combined with other forms of occupation such as cultivation, carting or general labour. The picture of the economic life of the people is not complete without an accurate account of all the principal sources of their livelihood. A complete return of the subsidiary or secondary occupations would enable us to follow the movement of those who are abandoning or are inclined to abandon their hereditary occupations for some other, while the question of how most profitably to occupy the considerable leisure enjoyed by the ordinary cultivator is one of the economic problems of the future in this country. Unfortunately, however, the difficulties in the way of

obtaining a trustworthy return of secondary occupations are serious and it is the general opinion that there is no part of the census schedule in which there is greater inaccuracy than in column 10. In the first place it is difficult to explain exactly what is required in the column to the enumerator who when he does understand, has himself to judge possibly which of several of the subsidiary occupations of the worker is the most important and whether it is remunerative or productive enough to be regarded as a census occupation at all. Again the honesty of the enumerator in regard to this column cannot be checked except on the spot, since a blank may equally mean that there was no subsidiary occupation or that the enumerator was too lazy to enquire whether there was or not. An examination of the statistics of this column in the Bombay Census clearly shows that the filling up of the column has seriously deteriorated since 1901 when it was first instituted. In fact Mr Sedgwick considered the present figures so entirely untrustworthy that he decided to abandon the tables altogether while other Provincial Superintendents treat the statistics obtained with undisguised suspicion. It was not therefore possible to compile figures for all India and such provincial figures as appear worth considering will be discussed under the individual occupational heads.

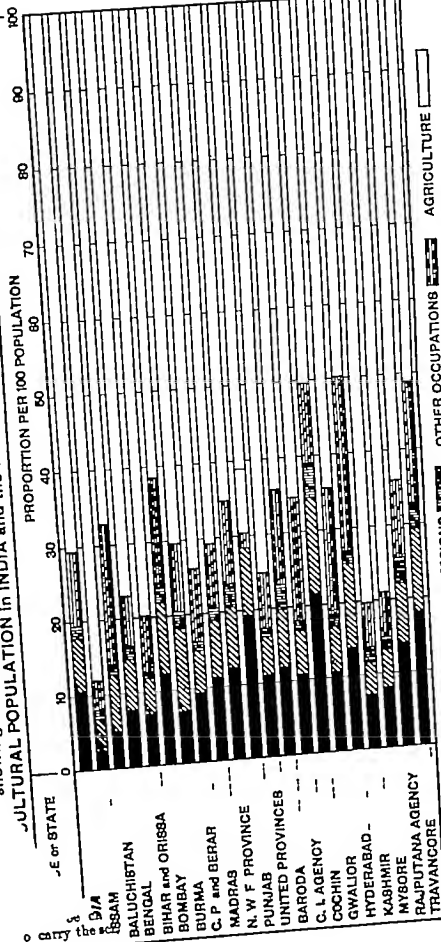
Workers and Dependants.

206 The circumstances which led to the attempt, made first in 1901 to distinguish workers and dependants have been briefly alluded to in para. 202 above. It is undoubtedly desirable to know how many workers and how many non-workers there are in the population. Whether this information is so valuable when taken out into the details of particular occupations is more doubtful. It is obvious that in all professions appropriated specially to men the workers will be supporting a normal number of non-workers, i.e. the women and children of their families, while in professions ordinarily open to women, e.g. grinding of grain, or to boys, e.g. cow herding, the workers will be supporting few except themselves. It is of real interest to distinguish the part played by women and children in organised industries and this information can be obtained in a more direct way on our special schedules but exact figures of dependants in general occupations are probably of not much value and the difficulties of drawing a clear distinction between the nature of a worker and a dependant are very great. They arise chiefly in assessing the value of the part which women and children take in the occupations of the household or the field, and the distinction is often influenced by the estimation of the relative dignity of work and dependance held by the enumerator or the public. The means of subsistence of a household, or indeed of a community include occupations which are of distinct economic importance but of which the results are often not definitely expressible in terms of monetary income. The economic distinction between the work of a man who assists nature to produce the raw material of food in the field and the dependance of the woman who converts that raw material into edible food in the house is when analysed not sustainable. The Provincial Superintendent, Punjab pertinently remarks—

"I suspect, however that a very large part of the apparent want of employment of female labour arises from the fact that the classification of occupations was drawn up by men and not by women many women appear as unemployed when they should be classed as actual workers engaged in domestic duties, in cooking, grinding of grain, drawing water from wells, taking food to their families in the field, preparing and mending clothes, and last but certainly not least in child-bearing. In fact the occupational tables will have to be completely revised before a fair comparison of the extent of male and female occupations can be drawn."

In Burma a definite attempt was made to distinguish a category of housewives, to contain women whose whole-time occupation was the care of the household, but the figures obtained were not considered sufficiently trustworthy to use in tabulation and Mr Grantham thinks that the estimate of the economic value of the work done by women who are not absolutely whole-time workers must be so much a matter of opinion that no statistics based upon it can be of any value. Almost equal difficulty arises in the assessment of children as workers or dependants. Among the working classes children begin to assist their parents in the family occupations at a very early age but the value of their work is very much a matter of opinion and in some cases the difficulty was solved by arbitrary instructions to the effect that boys over twelve years of age who assisted in field work were to be classed as workers. But while, in view of these difficulties, it is unsafe to carry the scrutiny of workers and dependants into the details of small units it is

showing the PROPORTIONS of the INDUSTRIAL, COMMERCIAL, PROFESSIONAL, AGRICULTURAL POPULATION in INDIA and the various PROVINCES STATES and AGENCIES



INDUSTRY ■■■■ COMMERCE ■■■■ PROFESSIONS ■■■■ OTHER OCCUPATIONS ■■■■ AGRICULTURE ■■■■

N. B. Provinces are inclusive of the States attached to them, except in the case of Madras which does not include Cochin and Travancore.

distinctly interesting to notice, as an example of the permanence of large figures, that as shown in the marginal statement, the results of dividing the whole population into these two economic categories do not differ much at different censuses. We may recollect that the number of persons aged between 15 and 50 which is roughly the working age-period of life in the Indian population, is about 19 per cent and as in the case of the workers has fallen in the decade owing to heavy adult mortality. The proportion of workers and dependants in the main occupation is given in Table I at the end of this chapter. The marginal table gives the percentages for the twelve classes and a few more important sub-classes. The ratios conform in the main to what are the obvious social and economic facts. The surprisingly low percentage of dependants under the heading Public Force is due to the large foreign element in this category which consists largely of male workers without their families. The regional figures which are given below suggest little relation between dependence and prosperity or density. Taking the proportions of extreme youth, extreme age and defective persons as constant in the various units of the population, the variable element is roughly the proportion of women workers in each community or region and this differs widely between the Muhammadan populations of the north-west and eastern provinces and the lower Hindu and aboriginal peoples of the centre and south of the country. It is hardly necessary to pursue the subject into greater detail, since the more interesting features of the return can be dealt with in the discussion of industrial occupations and of the part taken in them by women and children.

Year	Workers	Dependants
1901	17	1
1911	17	1
1921	16	1

Percentage of Dependents to Workers	1921	1911
I. Amish and American	1	1
II. Muslim	2	2
III. Factory	3	0
IV. Trade	4	1
V. Public Force	5	1
VI. Transport	6	1
VII. Public Administration	7	1
VIII. Professions and liberal arts	8	1
IX. Independent incomes	9	1
X. Domestic Service	10	1
XI. Unclassified	11	1
XII. Unproductive	12	1

Proportion of Dependents to Workers	1921	1911
Andhra	1	1
Bihar	2	2
Bihar & Orissa	3	3
Central Provinces	4	4
Coastal Provinces	5	5
Madras	6	6
N.W.F. Province	7	7
Punjab	8	8
United Provinces	9	9

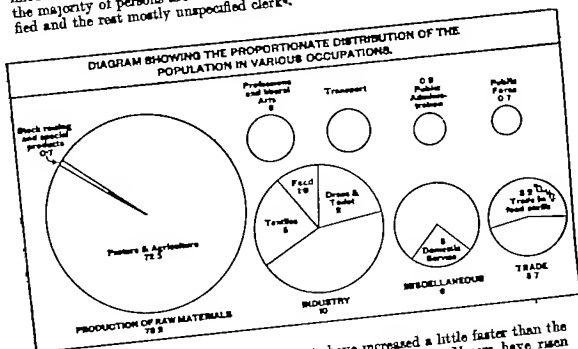
Section II—Statistical results of the occupational Census

207 The general distribution of the population by occupations is shown in the General distribution marginal statement in the diagram below and in the diagram opposite India is essentially an agricultural country and agriculture proper supports 221 millions of persons or 71 per cent of the population of the Empire. If we add the pastoral and hunting occupations the percentage rises to 73, while a considerable proportion of the unfortunately large number of persons in the category of vague and unclassifiable occupations are probably labourers closely connected with the occupations of the land. Industries support 10 per cent of the population, but the bulk of these are engaged in unorganised industries connected with the supply of personal and household necessities and the simple implements of work. Organized industries occupy only 1 per cent of the people. In trade and transport, on which less than 6 per cent and 2 per cent respectively, depend a not inconsiderable number are connected with the disposal of the various kinds of agricultural products. The administration and protection of the country engages only 4,825,479 persons, or 1½ per cent of the population, and the remainder are supported by domestic, miscellaneous and unproductive occupations. Though the extent to which agriculture predominates in individual provinces varies, there is no region in which it does not in some form easily take the first place. In spite of the trade of Calcutta and the numerous industrial and mining concerns of Bengal and Bihar and

Occupational Sub-class	Number per 10,000 of total population supported	Percentage of population
Total	10,000	100
I Pasture agriculture and hunting	7,205	71.6
II Mines and minerals	17	+2.3
III Industry	1,019	+6.6
IV Transport	177	+13.8
V Trade	573	+2.0
VI Public Force	69	+9.0
VII Public Administration	84	+1
VIII Professions and liberal arts	159	+7.1
IX Independent incomes	15	+11.1
X Domestic service	144	+6
XI Unclassified	751	+20.1
XII Unproductive	101	+5.7

work. Organized industries occupy only 1 per cent of the people. In trade and transport, on which less than 6 per cent and 2 per cent respectively, depend a not inconsiderable number are connected with the disposal of the various kinds of agricultural products. The administration and protection of the country engages only 4,825,479 persons, or 1½ per cent of the population, and the remainder are supported by domestic, miscellaneous and unproductive occupations. Though the extent to which agriculture predominates in individual provinces varies, there is no region in which it does not in some form easily take the first place. In spite of the trade of Calcutta and the numerous industrial and mining concerns of Bengal and Bihar and

Orissa the population of the eastern provinces is overwhelmingly agricultural and contains a higher percentage of persons supported by the land than any other tract of India. Of industrial workers the largest proportions in the local population are in the Punjab the United Provinces and Bombay. Of these three provinces, however, agriculture dominates the economic life of the first two where the industrial occupations, though they engage a substantial number of persons, are mostly of the cottage industry type. In Bombay the development of organized industry is of some economic importance but is at present largely confined to a few of the biggest cities. In the category of unclassified occupations the majority of persons are labourers whose particular form of labour is unspecified and the rest mostly unspecified clerks.



Compared with 1911 the agriculturists have increased a little faster than the total population, though fishermen and hunters are fewer. Miners have risen in number with the recent expansion of the industry. Industries have substantially decreased and of the principal forms of industry the textile workers have dropped considerably as also have potters and workers in wood and metal. An increase under transport by rail is countered by a drop under transport by road. Trade has increased, trade in textiles showing a slight rise and trade in food a slight drop. The number employed in public administration is practically stationary but the army has risen while the police has fallen heavily. Law and medicine have gained at the expense of religion, and though instruction has spread letters have fallen. Rentiers are fewer and domestic servants as many. Beggars and vagrants, the raw material of crime and disease have decreased but criminals, the finished article, have risen in numbers.

Class A—Production of Raw materials

203 The number of those supported by Agriculture as a primary occupation is 224 millions, representing a proportion of 71 per cent of the total population but the ratio varies considerably in different provinces. The category of agriculture includes groups 1 to 7 of the classified scheme, viz. —

(a) Ordinary cultivation

- 1 Income from rent of Agricultural land.
- 2 Ordinary cultivators.
- 3 Agents, managers of landed estates (not planters) clerks, rent collectors etc.
- 4 Farm servants.
- 5 Field labourers

(b) Growers of special products and market gardening

- 6 Tea, coffee cinchona, rubber and indigo plantations.
- 7 Fruit, flower vegetable, betel, vine areca nut, etc. growers.

The term agricultural occupation is therefore used in a somewhat loose and extended manner. It includes, on the one hand, a large number of landlords who have themselves no direct connection with the cultivation of the land which they own—many of these might, from an economic point of view, equally well be included with those who in group 180 are classed as persons living on their own income—and they are definitely held to be "non-agricultural" for the purposes of certain statutory enactments. Again the term covers a certain number of agents, factory managers, collectors and so forth who, though connected with the land, hardly exercise agricultural occupations, while on the other hand it also covers the primitive processes employed by backward tribes in raising food crops from the ground, which are called *taungya* cultivation in Burma and described in India by various terms, such as *khamori dhaya* and so forth and generally consist in the simple method of burning down successive patches of jungle and sowing seeds in the ashes. The instance of the employment of the term Agriculture to cover

variety of occupations some only remotely connected with Agriculture itself, illustrates the disadvantages of a system of classification which is based on industry rather than exact personal occupation.

Again the distinction between those who live on income from agricultural land and those who cultivate themselves is not always an easy one to make. Various methods were prescribed in different provinces to obtain the information required for these categories and to add to it further distinctions of agricultural status which would be locally useful, and owing to changes made in these methods from time to time it is not altogether safe to compare the figures of successive censuses. Thus in Bombay on the present occasion agriculturists were subdivided into landlords cultivating owners, cultivating tenants and cultivators unclassified. Of this attempt Mr. Sedgwick writes—

"Nevertheless an extraordinary difficulty was experienced owing to the following among other causes—(1) Many cultivators have about 50 per cent. of their own land and 50 per cent. of rented land, and (2) the ordinary types of ryot and tenant are not the only types of cultivator in the Presidency. We are faced with all sorts of Inam tenures, sub-tenancies, part-hires and a host of other classes, with innumerable technical vernacular titles. In particular there is the old quarrel between Inamdar and cultivator, one saying that he owns the land and leases it out as private property and the other saying that he is the owner and that the Inamdar's rights are limited to receiving part of the assessment in place of Government. In view of the undesirability of the census being used as evidence in these disputes I had to direct that cultivators in Inam villages should be separately shown and those where so shown, have been added to 'unclassified'. This is one of the reasons why the 'Unclassified' figure is so high."

209 The tendency to enter in the schedules technical names denoting the status of the agriculturist with reference to his holding considerably enhances the difficulty of obtaining clear cut categories of those who live on income from land and those who cultivate, as such words as *patidar*, *thelidar*, *malguzar* do not themselves indicate the essential difference required. Similarly considerable confusion is caused by the failure to distinguish revenue and rent, and in Assam the distinction of cultivators as revenue payers and rent-payers, which had been made in the census of 1911, was abolished under the orders of the Local Government. In most provinces, however, differences of legal status were ignored and the criterion was simply based on whether the income was chiefly from agricultural rents or from direct cultivation. Thus the zamindar of an estate from which he received considerable rental would logically be classified as an ordinary cultivator if his home-farm profits exceeded his net rent-roll profits. On the other hand it is

Province.	Number of cultivators per 100 rent receivers.	
	1921	1911
Assam	12,014	11,107
Bengal	2,407	2,743
Bihar & Orissa	8,752	3,510
Bombay	1,625	1,913
Burma	4,812	2,758
C. P. & Berar	3,808	6,125
Madras	779	2,380
N. W. F. Pro- vince	99	1,317
Punjab	1,098	1,146
United Pro- vinces	4,655	3,977

unlikely that such a classification would be made in actual practice, as the prestige associated with the status of landlord would undoubtedly prevail in the return over considerations of mere actual profit. Bearing in mind these variable factors inherent in the returns due to changing methods of classification, we may notice that variations in the number and proportion of landlords and cultivators between the present and the last census differ considerably in different Provinces. In Bengal landlords have increased by 9 per cent. and cultivators by only 3 per cent. The Superintendent of Census Operations, Bengal, writes—

"The landlord class which includes a very much greater number of small middlemen than of *Zamindars* paying revenue direct to Government, increased by 23 per cent. between

1901 and 1911 but by much less, 9 per cent. during the last decade. In both cases the increase has been something like three times as great as among the population as a whole. An accurate estimate of the average rent paid by ordinary cultivators in Bengal will not be obtainable until the Settlement Department has completed a record of rights for the whole Province, but it seems likely from the statistics already available and a general impression of the conditions in parts of the Province for which a Settlement Record has not yet been prepared, that the average rent paid by *rajpots* for all classes of land is rather over Rs. 3 per acre. This means that the total realized as rent by the landlord class including middlemen in Bengal is Rs. 13,50,00,000 per annum. Allowing six persons to the average rent-receiver's family nearly one more than the average for the whole population, this gives the average rent receiver's family a gross income of only Rs. 620 a year just over Rs. 50 per month and about £41 per year. When it is remembered that not less than 10 per cent. has to come off for land revenue and the cost of collecting rents though the small middlemen usually collect their rents themselves and that a small number of great landlords take a large proportion of the assets of the land to themselves it will be realized that most of the landlord and middlemen class in Bengal are by no means well-to-do.

210 Mr Thompson goes on to illustrate the size of landed properties in Bengal by a series of figures showing that the number of cultivators per 100 landlords varies from 17.111 in the Chittagong Hill Tracts to 752 in Howrah. The reduction of the size of the property of the average rent receiver comes about either by the disintegration of the estates or by subinfeudation. In some cases the tendency is for the number of co-sharers in estates and tenures to multiply while in others e.g. in Bakarganj tenures are multiplied by the process of subinfeudation so that there are often more than a dozen grades of middle rights between the zamindar who pays revenue to Government and the actual cultivator. In Bihar and Orissa on the other hand the large decline of 45 per cent. in the number of landlords is probably partly due to changes of classification, but in the United Provinces the Census Superintendent would ascribe a similar decline in the figures of landlords combined with a large rise in the number of cultivators, to more real causes. Mr Edye points out that this increase in the number of cultivators is largely at the expense of labour and thinks that the main factors are that the rise in the price of grain and in the rate of wages has not been accompanied by a rise in rents, so that, while the rise in the price of grain has undoubtedly attracted men from other occupations to cultivation and high wages have given the labourer capital to invest in and cultivate agricultural holdings, the slow adjustment of rents to prices has made the position of "rent receiver" less profitable than that of cultivator. In the Punjab (including Delhi) the number of ordinary cultivators has increased by 4.5 per cent. reflecting the extension of cultivation in the canal colonies. The decline of 9 per cent. in the rent-receivers may or may not have the same kind of significance as that ascribed to it in the United Provinces, but we know from independent figures that the proportion of tenants has been steadily increasing in this Province. The relation between the figures of rent-receivers and cultivators must depend largely on the nature of the land tenure for example a large number of cultivators in Bombay and Assam hold directly from Government and apart from their doubtful reliability the figures cannot, therefore, be used to give a picture of the extent of ownership and tenancy in different provinces.

211 A more interesting comparison can perhaps be made between the number

Province	Number of acres cultivated per 100 ordinary cultivators
Assam	294
Bengal	212
Bihar and Orissa	309
Bombay	1,213
Burma	845
C. P. and Berar	844
Madras	491
N. W. F. Province	1,122
Punjab	618
United Provinces	511

of cultivators (workers) and the acreage cultivated. The figures of some of the main provinces (British districts only) are given in the marginal table. India is a country of comparatively small holdings, often of the allotment size but cultivated on an extensive system applicable to large areas and under a method which as it utilizes to the full neither the energy of the worker nor the productivity of the soil, is the reverse of economic. Writing of the relation between the number of cultivators shown in the census tables and the acreage worked Mr Thompson (Bengal) says—

According to the Agricultural Statistics published for 1919-'20 there are 21,164,800 acres of land under cultivation in British Territory in Bengal and the number of actual workers in cultivation, ordinary cultivators, farm servants, field labourers and growers of special products in British Bengal is 11,000,029. This means only 2.215 acres per worker. It is in such figures as these that the explanation of the poverty of the cultivator lies. The cultivation of less than ½ acres of land cannot employ more than a comparatively small number

of days in the year. The cultivator works fairly hard for a few days when he ploughs his land and puts down his crops and again when he harvests them, but for most of the year he has little or nothing to do. The cultivated area in England and Wales is just over 26 million acres and according to the Census of 1911 the number of male workers in agriculture was 1,253,859 while female workers on the land were very few indeed. These figures give some 21 acres per worker, 10 times as much as in Bengal. In 1851, in England and Wales, there were 1,511,080 male workers in agricultural occupations and the cultivated area was not less than now a days. This gives one worker for about 17 acres in the days before mechanical appliances had been brought in to any considerable extent to assist the farmer. In the great wheat producing countries of the world—for instance, in the Western States of America and in the Argentine,

	Male	Female
White	417.00	1.80
Native	240.7	104.20
Asiatic	101.7	404
Other coloured	28.07	1.14
Total	754.67	133.78

where labour is very scarce and mechanical appliances and power are more used than in England, the acreage per worker is very much greater. The total area of farms under the Union of South Africa where indigenous labour is available is 229,270,000 acres, of which 13,856,152 acres are under the plough and the rest is pasture. According to the recent census the number of workers in agriculture is shown in the margin.

Here Europeans are only 10.96 per cent and including pasture land as well as that which is under the plough there are 160.2 acres per agricultural worker. Cultivated land is only 6.1 per cent of the total area of the farms, but even if the workers spend one third of their time on this small area there are 83 acres cultivated per whole time worker. This is 38 times as much as the average worker in agriculture has to deal with in Bengal. Agriculture may not be so intensive in South Africa as in Bengal, but on the other hand the alluvial plains of the delta here yield their return with comparatively little expenditure of labour and such figures as these make it very clear that the Bengali cultivator has not nearly as much work to do as will fill his time. This is the root cause of his poverty.

It is largely the land system of the country that is responsible for the present conditions. In other countries where the holdings are comparatively large and the farmer can only manage with his own hands a fraction of what is to be done, he employs hired workers and engages as many as are required to do the work, and no more. In Bengal the holdings have been so minutely subdivided that there is not enough work for the cultivators, but on the other hand there is no other work to which they can turn their hand. The very rights which the cultivator has in his land and which it has been the object of the tenancy legislation to preserve to him, stand in the way of an adjustment between the supply and demand for labour in this Province. He cannot be expected to sacrifice these rights and go in search of work in industrial centres except in the last extremity, and the only amelioration of present conditions in Bengal that seems possible, is by bringing work within reach of the cultivator near his own village. This no doubt is the reasoning of the more thoughtful of those who preach the use of the *charla* and it is sound as far as it goes. But it does not solve the problem. The Bengali cultivator is used to obtaining a sufficient return for very little labour from his land to support him at his present standard of living. He certainly will not take kindly to any subsidiary occupation which gives but a very poor return for a great expenditure of labour and time. The economies of the *charla* are beyond hope, though those of the hand loom are not by any means in the same position. Not only do laziness and the easy return for little labour on his land disincite the Bengali for more work in order that he may be able to raise his standard of living, but there are many prejudices and much false pride, which will be difficult to overcome. At present the cultivator holds himself above many forms of labour to which he might turn. In Eastern Bengal an ordinary cultivator would not think of taking up the employment of an earth worker and fill in part of his spare time by working as a labourer repairing the roads or cutting tanks. Such prejudices must break down in time with the increase of the pressure of the agricultural population on the soil, but the breaking will be a slow progress. The best hope for the country would seem to lie in an extension of organised industry, which is at present confined to the banks of the Hooghly, to other parts. It looks a reasonable proposition to establish a jute mill, for instance, somewhere near Narayanganj or Chandpur, to use oil engines for power, bringing the fuel direct from Assam or Burma, and to employ local labour, but he would be a bold man who would finance such an enterprise. The doubtful factor would be the willingness of local labour. There is plenty of it available, but it is doubtful whether it would give up its present lazy habits and its prejudices, and come forward. The pioneer mill, if it proved a success, would achieve the greatest possible good to Eastern Bengal for others would follow and the cultivator would be given the opportunity, which otherwise he has no chance to get, of having a good day's work and earning a full day's wage."

The economic relation between man-power and cultivated area has also been discussed in full in Mr. Calvert's recently published book "*The Wealth and Welfare of the Punjab*." He estimates that the work done by the average cultivator in the Punjab does not represent more than about 150 days full labour in 12 months and that even in the occupied days the idea of the Indian cultivator of what constitutes a full day's task is well below that prevalent in more progressive western countries.

Agricultural labour.

212. The heading *Farm Servants and Field Labourers* is intended to contain

Occupation.	1901.	1911.	Percentage per cent.
700 Farm servants and field labourers	27,034,817	1,226,326	- 1
Labourers and unclassified.	8,308,386	8,273,887	+13

the more permanent element of agricultural labour. The figures, however, fluctuate considerably, and must be collated with the figures of other labourers and of labourers unspecified (group 187) from whom in the majority of cases they do not greatly differ. The actual number returned under each head and the variation per cent. since 1911 is given in the margin. In Bengal the number of regular farm servants returned was only 9,346 workers and though the number of field workers returned is more numerous, viz. 1,796,000 this total for field labour is small compared with the number of cultivators, amounting to only one hired labourer to every five cultivators, and in Eastern Bengal to as few as one to eight cultivators. Mr. Thompson pertinently contrasts the conditions in England and Wales, where there were, according to the Census of 1911 well over three hired labourers to every farmer and recalls that in 1851 before the spread of machinery there were in England and other centres of the continent about six

Province.	Number of farm servants and field labourers per 100 acres of soil.	
	1901.	1911.
Assam	3	3
Bengal	10	10
Bihar & Orissa	25	47
Bombay	41	57
Burma	28	27
C. P. & Berar	32	36
Madras	53	53
Punjab	12	15
United Provinces	16	22

hired labourers to each farmer. The number of farm servants and field labourers per 100 cultivators is given in the margin for the main provinces (British districts only) but as has been observed already the accuracy of the figures is very doubtful. The average size of the holding in Assam and Bengal, and especially Eastern Bengal, is so small that cultivation of it is hardly ever too much for the owner himself to accomplish. The same conditions are found in other tracts, but there has evidently also been in the United Provinces and Bihar and Orissa an absorption into the ranks of cultivators of labourers

who were enabled by high wages to obtain a plot of land. Mr. Tallents points out that the recent settlement of some of the Chota Nagpur districts recognized the tenancy of a good many new cultivators and that there has been considerable reclamation of jungle and waste land in the decade. It may be that in Bombay the Central Provinces and Madras, parts of which were badly hit by the failure of the crops in 1920 the opposite tendency developed and the smaller cultivator sank again to the level of a labourer. But the great mass of general labour existing in the central and southern portions of the country is of an amorphous type, which cannot readily be confined at any time in a single category or appor- tioned to a definite or permanent occupational group.

A type of agricultural labour which exists in the Bombay Presidency and probably also in other parts of the country is described by Mr. Sedgwick in the Bombay Report under the name of *Hali*. These *Halis*, who are usually *Bhils*, *Talavias* or some other low cast are bound to their masters by system of cash advance of which their labour forms a permanent interest but never repays the capital. The *serfdom* is hereditary apparently includes all members of the family and can only be broken by the flight of the *serf*. A milder variant of this system is the well-known and wide-spread system by which a man binds himself and his services to a master in exchange eventually for the hand of the daughter and the house. In such cases the obligation is customary but not legally enforceable and the engagement is dissoluble at the option of any party concerned.

Order 8 (b) Government of special products.

213. This sub-order contains the

Particulars.	Number of workers on plantations according to			
	Tea.		Industrial Subsidies.	
	Male.	Female.	Male.	Female.
Andhra	202,388	62,928	265,316	202,388
Assam	1,24,000	1,12,171	1,12,171	1,12,171
Bengal	10,726	207,769	207,769	10,726
Bihar	15,274	15,274	15,274	15,274
Bombay	971	15	15	971
Burma	27,130	346	346	27,130
Central Provinces	328	6,154	6,154	328
Madras	2,246	715	715	2,246
United Provinces	643	4,246	4,246	643

heads available for them makes any comparison of the figures somewhat doubtful. The principal regional figures are given in the margin for the workers

on plantations and the cultivators of vegetables. The former group is the most important and includes the tea, coffee, and rubber plantations for which we have figures in the special schedule. The total in this group (8) in the general census is 1,422,000 as against just over a million in 1911. The figures must include a considerable number of the labourers in the plantations, and the uncertainty in the entry of labourers generally and their correct classification under the various

labour.

212. The heading **Farm Servants and Field Labourers** is intended to contain

Occupation.	1921.	1911.	Variation per cent.
Male servants and field labourers	37,306,817	41,216,251	-9
Females and other persons	9,500,183	8,271,887	+15.4

the more permanent element of agricultural labour. The figures, however, fluctuate considerably and must be collated with the figures of other labourers and of labourers unspecified (group 187) from whom in the majority of cases they do not greatly differ. The actual number returned under each head and the variation per cent. since 1911 is given in the margin. In Bengal the number of regular farm servants returned was only 9,345 workers and though the number of field workers returned is more numerous, viz. 1 798 000 this total for field labour is small compared with the number of cultivators, amounting to only one hired labourer to every five cultivators, and in Eastern Bengal to as few as one to eight cultivators. Mr Thompson pertinently contrasts the conditions in England and Wales, where there were, according to the Census of 1911 well over three hired labourers to every farmer and recalls that in 1851 before the spread of machinery there were in England and other centres of the continent about six

Province	Number of farm servants and field labourers per 100 cultivators	
	1921	1911
Assam	3	3
Bengal	15	18
Bihar & Orissa	29	47
Bombay	41	67
Burma	29	37
C. P. & Berar	33	36
Madras	43	43
Punjab	13	18
United Provinces	16	22

hired labourers to each farmer. The number of farm servants and field labourers per 100 cultivators is given in the margin for the main provinces (British districts only) but as has been observed already the accuracy of the figures is very doubtful. The average size of the holding in Assam and Bengal, and especially Eastern Bengal, is so small that cultivation of it is hardly ever too much for the owner himself to accomplish. The same conditions are found in other tracts, but there has evidently also been in the United Provinces and Bihar and Orissa an absorption into the ranks of cultivators of labourers who were enabled by high wages to obtain a plot of land. Mr Tallents points out that the recent settlement of some of the Chota Nagpur districts recognized the tenancy of a good many new cultivators and that there has been considerable reclamation of jungle and waste land in the decade. It may be that in Bombay the Central Provinces and Madras, parts of which were badly hit by the failure of the crops in 1920 the opposite tendency developed and the smaller cultivator sank again to the level of a labourer. But the great mass of general labour existing in the central and southern portions of the country is of an amorphous type, which cannot readily be confined at any time in a single category or apportioned to a definite or permanent occupational group.

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b) *Croppers
& planters.*

213. This sub-order contains the workers on plantations and the cultivators

Province	Number of workers on plantations according to			
	Crops.		Industrial establishments	
	Male.	Female.	Male.	Female.
India	268,238	87,686	428,618	268,988
Bombay	121,774	31,311	178,786	7,199
Bengal	21,771	367,760	26,311	29,653
Burma	18	11,878	4,384	807
C. P. & Berar	367	51	10	134
Madras	87,188	17,346	23,849	24,490
United Provinces	429	121	—	—
Madras, Mysore Punjab, etc.	12,398	7	94	171
	614	4,7	24,174	3,479

of vegetables. The former group is the most important and includes the tea, coffee and rubber plantations for which we have figures in the special schedule. The total in this group (8) in the general census is 1 422 000 as against just over a million in 1911. The figures must include a considerable number of the labourers in the plantations and the uncertainty in the entry of labourers generally and their correct classification under the various

heads available for them makes any comparison of the figures somewhat doubtful. The principal regional figures are given in the margin for the workers

and along with them are collated the figures of the industrial schedule for the same units. Of these special products tea is grown chiefly in Assam and Bengal, but also in the Nilgiris and Travancore, indigo in Bihar, coffee in the hills of Madras, Coorg and Mysore, and rubber in Burma and Cochin and Travancore. The tea garden population in Assam has increased by 35 per cent in the decade, and probably by more, since the Census of 1921 was taken

Tea Plantations

Province	Gardens		Persons employed	
	1911	1921	1911	1921
Assam	609	795	407,483	517,118
Bengal	240	340	101,286	188,540

at the time of a reduction of the labour force owing to depression in the industry. The number of persons employed has risen from 493,000 to 517,000 according to the Industrial Schedule, and the number of gardens from 609 to 795. The composition of the tea garden population in Assam

has already been discussed in Chapter III. Mr Lloyd writes —

“In addition to their regular labourers tea gardens in all districts get certain kinds of work done by outsiders. Ex-coolies settled near the gardens are generally available for part of the year, while people of other districts and hillmen come in the cold weather. In Goalpara numbers of labourers drift in from the Duars and Upper Assam (but these often become regular workers on the few tea estates of the district), and Nepalis from Jalpaiguri and Darjeeling are employed in opening out land for new gardens. In Kamrup local Muhammadans and Hindus (Kaltas, Kewats and Koches) work at ploughing and building, while Kacharis, Rabhas and other tribesmen take up hoeing. In Nowgong and Darrang, ex-coolies and Kacharis—many of whom come from Goalpara and Kamrup and live temporarily on the estates—do hoeing, jungle cutting and thatching; these are usually paid weekly. On the Lakhimpur gardens Nagas come down for jungle cutting, Manipuris make bricks, and many Nurnias come from Bihar for draining and earth work. These are housed free and paid on contract, they can earn from 6 to 8 annas each for a moderate day's work.”

In Bengal there are 340 gardens as against 240 in 1911, the majority being in Jalpaiguri and Darjeeling. Mr Thompson writes —

“The total number of employes in the industry was slightly less in 1921 than in 1911, for it had by that time not recovered from the disadvantageous position into which the war had thrown its markets. The old gardens were not working at full pressure as in 1911 and it is not possible to gauge the number that the new gardens are employing. There seems to have been a definite tendency to employ more women, though this may have been due to the fact that the Managers kept in employ the coolies who had settled on the gardens with their families and in Jalpaiguri, for instance, had less of the Nepali labour which comes down for comparatively short periods and includes a majority of males than 10 years earlier. In Jalpaiguri district the most numerous people among the labour force are Oraons and then Mundas, in Darjeeling Khambus and Rais (Jimdars) and then Murmis. Half the labour on the Chittagong gardens is made up by the Shekhs (Muhammadans) and in Tripura State the indigenous Tiparas have been employed. Of the coolies in Jalpaiguri, 90,348 were born in the Chota Nagpur plateau and 29,018 in Jalpaiguri district, mostly the children of imported coolies. Of the coolies in Darjeeling, 29,632 were born in the district, 8,359 on the Chota Nagpur plateau and most of the rest in Nepal. Most of the coolies on the gardens in Chittagong were born in the district.”

The tendency of the present day is for the gardens to pass out of the hands of private Europeans and Indians and for Companies with Indian Directors to take a much larger share than formerly. Taking the comparable figures of 1911 and 1921 the number of establishments in Assam owned by Companies has increased

Tea gardens controlled by—	1921	1911
Companies with European Directors	134	158
Indian	82	18
" mixed boards	11	
Privately owned by Europeans	36	46
" by Indians	27	18

from 506 to 629 and the number owned privately by Indians from 48 to 98 while the European owned gardens are still 55 as in 1911. In Bengal the figures are as given in the margin. Mr Thompson points

out that the spread of the tea industry into the Eastern Hill Tracts during the decade has been entirely due to Indian enterprise. The management of the tea gardens is still largely in the hands of Europeans. In Bengal 215 out of 340 gardens have European managers. The proportion of women employed in the industry is naturally very large, the number of females per 1,000 male workers shown in the Industrial Schedules being 910 in Assam and 1,157 in Bengal. The number of children per hundred adults (unskilled) is Assam 18, Bengal 23, the sexes being almost equally divided. The whole circumstance of tea garden labour has recently been explored by an expert Committee.

The number of coffee plantations and of persons employed in them is given in the margin. The corresponding number at

Province or State.	Private Establishments.	Per- sons.
Tamil	200	67,223
Coorg	134	2,74
Madras	127	1,07
Kerala	42	4,79
Other Provinces		64

the last census (special schedule) was 482 establishments employing 57 623 persons, but these included only establishments employing 20 and more persons. The coffee industry sustained a severe depression at the end of the decade and the Coorg report speaks of a serious set-back which reduced the labour employed on the plantations. Similar conditions seem to have occurred in the plantations in Madras and Mysore. As in the case of tea plantations women and children take an active part, there being 64 women per 100 men and 12 children per 100 adults (unskilled).

Order 1 () Forestry

214 Besides persons connected with the administration of the forests the order contains a large number of persons who make their livelihood by collecting forest produce. India possesses a virtual monopoly of the lac trade, and some of the most important centres in which lac is grown or shellac manufactured are in Bihar and Orissa. Some interesting information is given by Mr Tallents of the lac industry together with a statement showing the number of lac growers and the number and kind of trees based on a special return obtained at the time of the census. There were in the province 311 686 persons cultivating lac on over 6 million trees, chiefly of *bar kusum* and *palas* the best lac being grown on the *kusum*. The industry forms an important secondary occupation for the cultivators in Chota Nagpur and the profits made from it helped to tide them over the difficult times which followed the failure of the rains of 1918.

Order 1 (d)—Raising of Farm Stock.

215 In the whole of India 4.4 million persons or 140 in every ten thousand are supported by the raising and care of farm stock. The proportion varies from 7 per cent. in Baluchistan to 4 per cent. in Hyderabad it is 2 per cent. in Central Provinces and Berar Bombay Baroda and Rajputana and less than that in other Provinces and States. As compared with 1911 there has been a decrease of 14 per cent. in the number of persons supported by this order and this apparent reduction is accounted for by the fact that there are several other groups, viz. Group 70—manufacture of butter or ghee, 114—driving a cart, 133—sale of butter milk or ghee and 146—cattle dealing or hiring which deal with persons concerned with cattle and it is often difficult to say under which of these groups the occupation of members of the pastoral community have been classed. There is also a close alliance between agriculture and these occupations and it is probable that the decrease has been balanced in one of the agricultural occupations. About three quarters of the persons in this order are herdsmen, shepherds and goat-herds and of these nearly 2.2 millions are found in the United Provinces, Hyderabad, Bihar and Orissa, Bombay and the Central Provinces.

Sub-Class 14—Exploitation of Minerals.

216. The heading in the Occupation Table XVII distinguishes coal mines,

Description.	1901.	1911.
Total supported (Census)	600,000	578,000
Workers	238,000	238,000
Wages (Estimated)	297	32

petroleum mines and other mines and metallic minerals. In the special schedule there is more detailed differentiation. Compared with the census figure of 1911 there is a rise both in the number supported and the number of workers. The number of the latter corresponds very closely

with that returned in the special schedule

Coal Mines.

217 Of a total of 288 thousand supported by collieries 203 thousand are

Province	Number supported by industrial branches of	Workers
	Collieries.	Wages.
India	600	22,000
Bombay	2-4	17
Madras	1	101
C.P. Berar	7	1-4
Hyderabad State	1	12
Others	24	1,510

actual workers. The most important Coal mines lie in the provinces of Bihar and Orissa and Bengal. The Jhetria coal field in Manbhum, the importance of which is due to its accessibility and the superior quality of its coal alone produces over fifty per cent. of the total annual output of coal in India. According to the industrial census the total population employed in the

coal mines of Manbhum was 82,619 of whom 317 were managers, 1,519 belonged to the supervising and technical staff and 1,487 to the clerical staff while 32,843 were skilled and 46,428 unskilled workers. In the other important coal-

producing centre in the Hazaribagh district the oldest established colliery area is at Giridih, where the most important collieries are those worked by the East Indian Railway, which employ over 8,000 persons in all. The labour employed here unlike the labour of the Jherria fields, is entirely indigenous and there is not a single imported worker.

"For many miles around the coal field many of the villagers follow a dual occupation, working in their fields in the season of planting and harvesting and cutting coal for the rest of the time."

The labour is well organized and well looked after and this policy has obviated the acute and recurrent troubles of labour shortage suffered in the Jherria and other fields which mostly import their labour. Mr Tallents says —

"The labour employed in the coal field is not systematically recruited as it is for the tea-gardens. Each colliery makes its own arrangements. The small collieries often recruit direct, sending out *sirdars* for the purpose as necessity arises. The more usual practice followed by the larger collieries is to recruit through contractors, most collieries employ their own contractors, but there are a few large contractors in the coal-field who supply labour to more than one colliery. The contractor as a rule contracts not to supply labour but to cut coal and deliver it on the surface at a fixed price which allows him a profit of about 1 anna a ton on large contracts and 6 annas a ton on smaller ones. The contractor has often to make advances to the labourers of as much as Rs. 30 (representing 20 or 30 days' earnings) and has to take the risk of their bolting before the advances are paid off."

The unskilled labourers are mostly Bhuiyas, Bauris and Santals recruited from round about the collieries and neighbouring districts. Amongst the miners (*i.e.*, skilled coal cutters) the Santals are the most numerous and are commonly considered the most efficient followed by the Bauris a Bengal caste, and the Chamars chiefly from the Chhattisgarh tracts of the Central Provinces, who unlike the United Provinces labourers generally bring their women with them. Brahmans, Rajputs, Pasis, Goals come from the United Provinces, where in certain tracts between Unao and Allahabad there is now a reserve of trained labour available. Many of the Brahmans and Rajputs are employed as *sirdars* or gangmen, but they also cut coal. Of the labour supply Mr Tallents writes —

"It is a well-worn statement that the coal miner is an agriculturist who only turns to coal mining when force of circumstances drives him to seek some means of subsistence other than the fields. In July and August when the paddy is being transplanted and in November when it is being cut the mines are almost invariably working short handed. Anything in the nature of scarcity in the neighbouring districts is a blessing to the coal-field. The returns of the Jherria Mines Board of Health show that in the third-quarter of 1918 the labour population of the collieries was about 65,000. When the rains failed in September of that year the number began to rise, in the last quarter of 1918 the population numbered 80,000 and in the first quarter of 1919, when the pinch of scarcity was actually felt, it reached 100,000. The collieries therefore had very little trouble in connection with their labour in 1919, but when the agricultural situation improved in 1920 constant complaints were again heard of shortage of labour. Attempts were made to meet the difficulty by increasing the rates of remuneration but the result was not successful. The miners have a certain standard of comfort and show little desire to raise it when they find they can earn all they want by working fewer days in the week they limit their work to that number of days. In 1920, in spite of increased rates of pay, the average daily attendance fell off and the average output for working below-ground fell also. There is small ground for surprise if the miner, who is accustomed to the peaceful life of his native village, looks upon the prospect of settling permanently in the coal-field with aversion. A committee appointed in 1917 by the Local Government to enquire into the housing of labourers on the collieries of Bihar and Orissa was of opinion that "there are no amenities in the coal-field. The *dhauras* (lodgings) are neither beautiful nor healthful. The labourer enjoys no privacy in his domestic life. He has to carry his personal belongings about with him (even down the mine) for fear of theft. His only pleasure is that which is to be purchased at the liquor shop. There is no inducement for him to remain at the colliery for a minute longer than he can help." The more enlightened coal-owners house their labour in masonry *dhauras* with a roofing of tiles, concrete or brick arches, but not all *dhauras* are up to this standard, though the Mines Board of Health has already done a great deal to remove the worst of the aggregations of huts. But still it is easy to understand why the miner, even when housed in a perfect *dhaura* with every modern convenience, does not regard the life as one in which he would like his sons and sons' sons to engage. The committee of 1917 estimated that only 15 per cent of the colliery labourers in the Jherria field and those generally Santals were "settled" in the sense that they had been provided with cultivation and had built their own houses on the collieries (in the Ranganj field in Bengal the proportion is about 50 per cent) of the remainder 75 per cent were found to come for weeks or months together and live in the

dhurais while the remaining 10 per cent. lived in their own villages within a few miles of the mines and came to their work daily or when it suited them. Various suggestions have been offered as to the possibility of attracting a more regular force of labour to the coal-field, but the chief difficulty in giving effect to any of them has always been the lack of combination between the various collieries and no concerted action has ever been taken. There is no sign of a class of hereditary miners divorced from agriculture coming into existence to induce a family to settle they must be provided with land for cultivation and the restricted area on the surface of the Jherma field available for cultivation makes it impossible to settle the miners as is done at Raniganj or even more so at Giridih. Systematic recruitment and increased amenities will undoubtedly assist in attracting labour to Jherma, but no simple and final solution of this perennial difficulty is likely to be found.

The labour conditions above described apply with little modification to the Raniganj Colliery area in the Burdwan district of Bengal which contains 202 collieries employing 46 000 persons as compared with 37 600 persons in 1911. The bulk of the labour in this coal area consists of Santals and Baums from the Santal Parganas and Chota Nagpur but the Kamars are most numerous among the persons employed on the maintenance of machinery. Most of the collieries are controlled by registered companies, but the number of Europeans and Anglo-Indians employed in the managing and supervising posts is 687 as against 326 in 1911. Coal mining is important in Hyderabad State and the Central Provinces. In Hyderabad the Singarani colliery is controlled by a company with a mixed directorate and employs 9 826 men and 3,348 women, mostly recruited locally. The rapid development of the coal industry in the Central Provinces is evidenced by the fact that the number of mines has increased in ten years from five to seventeen and the workers from 3 000 to 9 600. Gondas are largely employed as coal cutters in the mines of the Pench Valley.

Other mines.

218 Of the other mines the vast iron deposits in the Singhbhum district of Bihar and Orissa and the adjoining tracts are as yet undeveloped the mines belonging to the Tata Iron and Steel Company and the Bengal Iron Company only employing at present about 5 000 local labourers. More than half the world's supply of mica comes from India and more than half the Indian supply from Bihar and Orissa. The largest number of persons employed in these mines (or so many of them as are registered) was 21 384 in 1918 but the industry was in a depressed state at the time of the census. The greater part of the manganese comes from the Central Provinces where 14 000 persons are employed in the mines near Ramleh in the Nagpur district.

Class B—Preparation and Supply of Material Substances

219 We have seen that 10·5

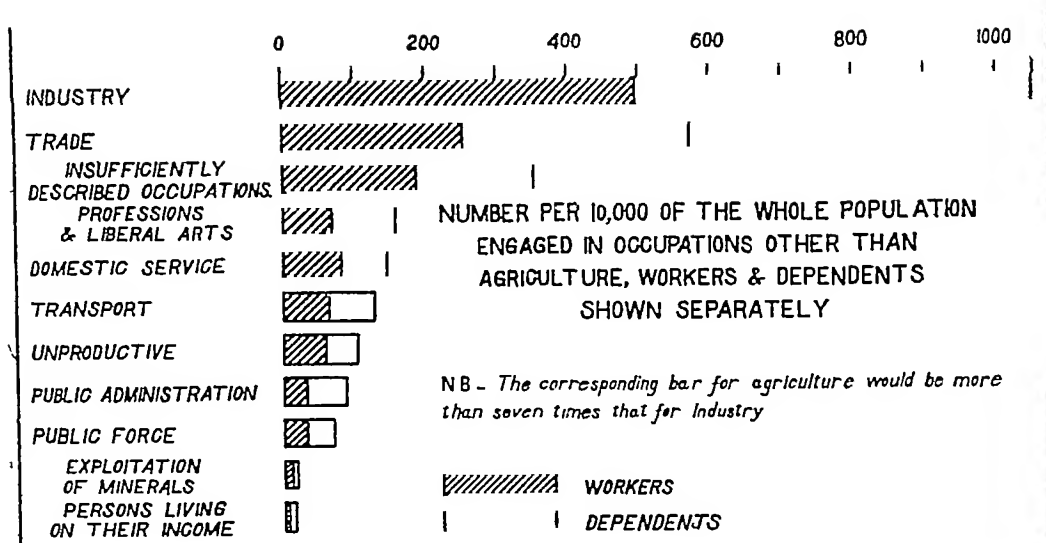
per cent of the population are supported by industries. The marginal statement shows the principal industries and the proportion supported by them according to the general census and the diagram below illustrates the importance of industry as compared with other non-agricultural occupation.

Industry	Number employed.	Percentage	Percentage of population (1911)
Industries	12,387	10·5	1·8
Trade	2,114	1·8	0·3
Wood	2,114	1·8	0·3
Wool	2,114	1·8	0·3
Textiles	2,114	1·8	0·3
Transport	2,114	1·8	0·3
Food	2,114	1·8	0·3
Domestic	2,114	1·8	0·3
Building	2,114	1·8	0·3
Services	2,114	1·8	0·3
Non-agricultural	2,114	1·8	0·3
Others	2,114	1·8	0·3

the United Provinces and Central India and of the States of the south of India. The principal cottage industries, such as textiles and pottery are largely combined with agriculture and general labour but the census returns are not sufficiently complete or trustworthy to give us clearly the figures of subsidiary industrial occupations. Of the total number of agriculturists (proprietors, cultivators and labourers) eight millions or about 8 per cent. of the actual workers returned a non-agricultural which in a large number of cases meant an industrial occupation, but this can represent only a part of those who have some subsidiary industrial occupation.

Pub. Class III—
Inter-India.

TEXTILES



220 Of the industries the textile industries are by far the most important, the number of persons occupied in industries connected with cotton being returned as 5,872,000 or just three-quarters of the whole number of those supported by textile industries Order 6—
Textiles.

The bulk of the organized establishments are in the western tracts, where the large cities owe a considerable portion of their prosperity to the development of the textile industries and the cotton-growing country is covered with mechanically worked gins and presses for the preliminary treatment of the raw material. Of the 2,037 establishments connected with cotton manufacture, employing in all 434,000 persons, no less than 737 establishments, with 277,000 employés or 64 per cent of the personnel, belong to the western Presidency and its States. An attempt was made in Bombay to distinguish in the general schedule between the factory workers and the home workers, but an analysis of the figures in that report shows that they are of very little use, owing to the varying number of those who must have returned themselves in general categories (labourer or weaver unspecified). For the workers in organized industries the figures of the special schedule are most trustworthy. For the cottage industries it is doubtful if the figures are of any absolute value and the numbers indirectly obtained from a census of handlooms are probably as near the truth as we can get.

Cotton		
Province	No of Establishments.	No of Employes
India	2,037	433,896
Bombay	737	276,003
Madras	343	41,408
C P & Berar	108	20,015
Punjab	170	9,006
United Provinces	77	17,251
Bengal	22	14,310
Others	481	44,303

of cotton-manufacturing establishments and their employés in India and the chief provinces are given in the margin. There has been considerable expanse of the industry during the decade, the Bombay figures showing an increase in textile establishments from 497 to 566 and in the number of employés from 198,169 to 277,857 persons. The industry is practically in the hands of Indians the number of European companies in Bombay being 17 out of 193 and of European or Anglo-

Indian private owners 27 out of 622. It is pointed out in the Madras report that the increase in the number of mechanically driven cotton gins and presses must make for a reduction in the presses employed and the decline of the number of persons engaged in cotton ginning, cleaning and pressing from 59,000 in 1911 to 21,000 in 1921 in that Presidency is partly ascribed to the increase in the number of ginning factories employing power from 99 to 205 in the decade (excluding the small factories employing less than 20 persons). In that Presidency the number of mills has almost doubled in 30 years and the number of employes trebled, and it is only the want of capital and organization that retards the further development of the industry. In the Central Provinces and Berar the organized industry has made considerable progress in the decade. There are now 12 weaving and spinning mills, employing 18,807 persons, an increase of 41 per cent, and the ginning and pressing factories have

increased from 163 to 186 but it seems from the number of employes that a good many of them must have been working at half strength. We have on this occasion obtained returns of the number of looms in use in textile establishments and the information has been tabulated in Part VII of Table XXII which classifies the statistics according as they are worked by power or hand and, in the latter case, have or have not fly-shuttles. In all the cotton looms come to 161,208 in India of which 135,587 or more than four fifths are worked by power. Of the 23,054 looms in British India worked by hand, more than three-fourths of which are in the Central Provinces, only 1,234 are without the fly-shuttle, but in the States, on the other hand, where the industry is not so advanced the old fashioned looms without the fly-shuttle form 60 per cent. of the handlooms. The small handloom factory is said to have been a failure in the Madras Presidency but it evidently still survives in the Cochin State where there are 60 establishments practically all of handlooms.

221 The silk industry flourishes chiefly in Bengal, Bombay and Kashmir. The large silk factory in Srinagar being worked on the most up-to-date lines with electric power. Rather more than half the handlooms are equipped with the fly-shuttle, the Bengal factories being the most and the Punjab the least up-to-date in this respect. Wool is manufactured chiefly in the Bombay Punjab United Provinces, Kashmir and Mysore. The majority of the hand looms are without the fly-shuttle except in Gwalior where practically all have them.

222 The population census gives 492,099 persons supported by the spinning, pressing and weaving of jute the corresponding number in 1911 being 362,269. According to the Industrial Schedule the number employed was 310,511. Of these only 82,000 were women and there were 23,000 children among the unskilled workmen. The number of dependants cannot be very large as a great proportion of the workers both skilled and unskilled in the mills are immigrants and there is work for all ages and sexes. It would seem probable therefore that the figures of the population census are about correct. There are a few mills and presses in Assam, Bihar and Orissa and Madras and the population census returns over 14,000 persons under this head in Bihar and Orissa alone. But the industry is practically confined to Bengal where 40,327 power looms are returned as at work and the figures of Bengal alone need be taken into account. Mr. Thompson writes of the industry as follows—

By far the most important factory industry in Bengal is that of spinning and weaving.

	NUMBER OF MILLS		NUMBER OF EMPLOYEES			
			1901.		1911.	
	1901.	1911.	Males.	Females.	Males.	Females.
TOTAL	66	89	237,394	47,690	368,393	66,366
European	1	1	1,000	9,178	21,878	9,826
Asiatic	15	27	27,048	17,492	27,877	16,000
31 Private	36	51	177,644	36,372	238,277	41,170
10 Public	—	6	8,236	794	9,234	1,262

Bengal has 62 jute mills, 50 of which have more than 400 employes each. The industry is confined to the banks of the Hooghly and has grown very much, the figures given in the marginal table will testify. Measured by the number employed the industry has grown by 42 per cent. during the 10 years, though the mills in Calcutta itself have declined and the total number

of concerns has only increased by 13. As the table below will show the industry is still as it was 10 years ago almost entirely controlled by Europeans and every one of the mills has a European manager while there are many as 35 Europeans and Anglo-Indian among the supervising staff and 186 among the clerical staff. The statistics regarding age, cast and birthplace of skilled workmen and unskilled labourers in jute mills, to be found in Parts IV and V of Census Table XXII, would prove very interesting.

	1901.	1911.	
Mills controlled by—			
European Directors	54	69	
Indian Directors	—	—	
Joint Boards	6	—	
Privately owned by—			
European	1	1	
Indian	1	1	

Among the skilled workers, the number in 1901 there were 8,001 and it women, nearly half of whom are occupied in "finishing" and the rest in "winding" and "preparing." 721 men boys and 14 employed in "spinning" and "preparing," and 109 are girls under 14 mainly employed with the adult women in "finishing." Mahomedans who call themselves 84 kh. are more numerous than any of the Hindu castes, of which the commonest to be found are the Chamars and Muchis. Kahluttia and large have in machinery per ton and maintenance and supply fair number of weavers. Only rather more than a quarter of the killed a known were born in Bengal, most of them in the near neighbourhood of the mills. 3,030 came from the United Provinces, 1,086 from North Bihar generally, 860 from Champaran, 19,797 from South Bihar and 8,62 from Orissa.

Among the unskilled labourers, 155,633, there is a much larger proportion of women and children, for there are 35,670 adult women, 19,195 boys and 2,311 girls under 14. Apparently women are less often employed in Howrah than elsewhere and children less often in Hooghly. Muhammadan Shekhs are much more numerous among the labourers in the mills on the Calcutta side of the Hooghly than the other. Among the Hindu castes the Chamars are the most numerous. The number of skilled workmen who were born in Bengal was a quarter of the total, but only 2 out of 11 of the unskilled labourers were born in Bengal, so that, allowing for the fact that many were children of immigrant workmen, it will be seen that the people of Bengal take a very small share in the labour employed by the premier factory industry of the Province, as they take but a very small share in its control. Of the unskilled labourers, 36,988 were born in the United Provinces, 29,607 in South Bihar, 23,218 in Orissa, 15,947 in North Bihar and as many as 10,786 in Madras. The mills have 40,327 looms in all, those in the 24-Parganas 23,267, those in Howrah district 8,514, those in Hooghly district 7,583 and those in Calcutta City 963.

To diminish the space required for transit, jute is pressed into bales even for the journey from the jute centres of Eastern Bengal to Calcutta. In places like Narayanganj, Chandpur, Madaripur and Serajganj jute to be sent down to Calcutta is made up in what are called *kutch* bales at no very great pressure and there are nowadays jute presses at a great many more places than these. The increase in the number of such presses has been very considerable of recent years as the figures of Jute presses from the industrial census of 1921 and 1911 for jute-growing districts of Eastern Bengal show, viz., 157 in 1921 and 69 in 1911.

The increase has not been so great as the figures indicate, for in 1911 presses employing less than 10 men were not counted, and the industry being seasonal and the census coming at the very end of the season—almost, it may be said, in the off season—many small presses had no doubt closed down. Jute to be exported from India requires to be very much more closely compressed and made into what are called *pucca* bales at a much greater pressure in more elaborately equipped presses. The presses located in Howrah, Calcutta and the 24-Parganas are presses employed in making up bales for export, and there are one or two such presses, for example, at Narayanganj and Chandpur. The work of these presses is not seasonal to quite the same extent as that of the smaller presses. The figures of the industrial census, showing only 10,642 persons employed in jute presses, are no measure of the extent of the industry, for many times as many persons find employment in the height of the season, in August, September and October."

223 Order No 7 of the Occupation Scheme contains those who were re- Order 7—Hides, Skins, etc.
turned as working in skins or as making leather articles generally. Makers of boots and shoes were classified in group 78. The distinction is however vague and it is probable that the groups are to a great extent interchangeable. While in this case again, where the hide and leather industry is so frequently a secondary occupation of the village labouring classes, it is largely a matter of chance whether the curing of hides or agricultural labour is returned by any individual. Mahai or Chamar. Taking the figures as they are we find that there are 731,124 persons in order 7 (persons occupied with hides and skins) and 2,075,659 boot and shoemakers (group 78). The occupation as a village industry is well distributed over the country, but is perhaps strongest in the Punjab, the United Provinces, the Central tracts and the Hyderabad State. Taking the two groups together the numbers returned at this and last census are very much the same. The organised industry employs 14,495 persons in 243 establishments. There are 188 tanneries, 81 of which are in the Madras Presidency, 37 in Bombay and 25 in Bengal. The leather industry had a tremendous impetus during and just after the war and in 1918-19 the value of tanned hides exported from Madras reached nearly 6½ crores. It dropped to something over ¾ of a crore in 1920-21 when the trade slumped. The number of tanneries and persons employed in 1911 were 122 and 9,399 respectively in India, but these figures exclude small establishments.

224 The number employed in wood and cane industries and classified under Order 8—Wood.
order 8 is 3.6 millions against 3.8 millions in 1911. The order contains sawyers and persons engaged in timber-works and basket makers. It includes therefore the village carpenters and also the large class of basket-weavers who belong to the lowest strata of society—the Mangs and other similar tribes. The industries here included are found all over India, the number of basket makers in Bihar and Orissa being specially large. The organized industry has 32,866 persons, almost all men, employed in 448 establishments. The chief saw mills are in Burma where 13,712 persons are employed in 139 establishments.

225 The number of metal-workers is about one-half, that of workers in wood Order 9—Metals.
Here also beside the organized industries, are included the village blacksmiths and the various cottage industries of brass, bell metal and so forth. Workers in iron form nearly 76 per cent of the whole number and workers in brass and cop-

per and bell metal about 14 per cent. The latter as well as the workers in tin and miscellaneous metals, have dropped considerably since 1911 but on the other hand traders in metal have gone up and the two categories are often confused. The cottage industries connected with the making of ordinary metal utensils and articles of use are found in all provinces, the numbers being specially large in Bengal, Bihar and Orissa, Bombay, Madras and the United Provinces. The industrial schedule shows in all 983 establishments employing 109 693 persons, only 9 339 being females. It includes the Government Arms factories and arsenals, presses and mints, workshops and engineering establishments and so forth but not some of the larger establishments connected with transport. These large workshops include one-third of the establishments and are mostly situated in the Presidency towns and large railway centres and employ about half the total number of em-

Superior Staff in Workshops.

Race	Europeans and Anglo-Indians	Indians
European Superior Indian and local	189	81
European and local	940	1,036
European and local	407	2,843
European and local	27	6,241

employed in this category. They are largely under European management and employ a considerable staff of Europeans and Anglo-Indians. The iron foundries and iron and steel works are 988 in number the largest and most important being situated in Bengal and Bihar and Orissa where about 49 000 or 84 per cent of the total number of operatives are employed. More than

half this number is in the iron and steel works in the Singhbhum district of which the factories at Jamshedpur are the most important and most completely organized. Mention has already been made of this interesting manufacturing town. Mr Talents writes—

The works of the Tata Iron and Steel Company form the greater part of the town and it gives an account of the population employed in the works is to give an account of the population of the fourth largest town in the province. Apart from the more highly skilled workers who are obtained from further afield labour is recruited chiefly from the neighbourhood and the Central Provinces, while a good many *khalas*, as the superior type of coolie is called, come from Orissa and the neighbourhood of Vizagapatam. Amongst the local "gangs" the *Hos* have on the whole the best reputation, and then the Santals and Bhuiyas. These men have proved their skill at straightening rails, laying railway tracks and various other manual jobs requiring accuracy of vision and have risen in a few cases to their merits from being coolies to earning as much as Rs. 50 and Rs. 60 month. The Chattisgarhis from the Central Provinces are on the whole less satisfactory workers many of them have been coming to the works in a half starved condition, but with good food and plenty of work they have improved in physique and efficiency. In addition to the labour employed in the works, the outside contractors employ a large labour force. It is noticeable that very few Orissas take employment under the company. The Indians in race prefer piece-work which they find outside under the contractors, and even the womenfolk earn as much as 1 anna a day in this way. The Orissas and the Bhuiyas also are often to be found working as brick-moulders in the town. Over 5 000 unskilled women are employed in the works in fetching and carrying or in shovelling; they usually come in batches with their husbands or their fellow villagers and live with them in the coolie towns. Most of them take their babies with them into the works, but crèches is provided in which babies can be left in charge of a matron. Children are only employed in small scale. The present rates of wages were fixed after the strike in March 1920 and are sufficient to attract labour without any special system of recruitment. No one at present earns less than 5 annas a day. At the cultivating seasons the number of labourers falls off but no embarrassment has yet been felt on that account. The labourers are under no obligation to stay in work, but for 75 days continuous work they get a bonus of one day's wages and a bonus of 2 days' wages for 77 consecutive days. The coolies get plots of land for which they pay ground rent and on which they build themselves houses. They get rice at cheap rates through the welfare department and cloth from the cloth stores. They get free medical attendance and free education for their children. The proportion of local workers who have definitely settled down to an industrial career differed from agriculture is small, a local estimate puts it at 10 per cent. The general shift is from 6 to 11-30 A.M. and again from 1-30 to 5 P.M. In addition to this the work is kept up continuously by means of the "A shift" which lasts from 6 A.M. to 2 P.M. the "B shift" which lasts from 2 to 10 P.M., and the "C shift" which lasts from 10 P.M. to 8 A.M.

The works are divided into various departments, of which the most essential are blast furnaces, the steel works, open hearth and the rolling mills. The blast furnaces which produce iron and steel which three were in working order at the time of the census employ a labour force of about 1 000 persons. There are 10 hands of European or allied races, chiefly Americans, and under them work a small army of more or less unskilled workers, all males such as pig iron breakers who earn from 10 annas to Rs. 1 a day and hot iron breakers who earn from 1 anna to Rs. 1-6. Most of these men are local, but good many come from Orissa, Vizagapatam and Poonch and there is a group of Khattriya *ikharis* from Sarat. The steel

works or open hearth employ some 2,300 men, from 1st smelters on as much as Rs 720 a month down to the lowest paid furnace helper on 12½ annas a day. Before the war the most highly skilled workmen in this department were usually recruited from Germany, but since their removal their places have been taken partly by Americans and partly by Englishmen. There are 34 skilled hands of European or allied races working as smelters in this department, in the lower ranks there is a fair sprinkling of Brahmans, Rajputs, Goalas, and unspecified Muhammadans, many of them from the United Provinces and the Central Provinces. The rolling mills employ some 2,500 hands. In this department there are 28 workmen of European and allied races, amongst whom the Yorkshire element is strong, and 11 Anglo-Indians. But Indians too are acquiring a high degree of skill at the work and there is an Indian roller in the bar mill who is drawing over Rs 300 a month. Their pay varies between this figure and Rs 2-1-6 a day. Apart from the rollers, which category includes assistant rollers, guide setters, coggers and roll turners, the other most numerous class of skilled operative in this department is the straighteners, originally Europeans were employed on this work but the local Hos and Santals have proved themselves to be naturally expert at it and they have now taken it over and earn anything from 7½ annas to Rs 2-14-9 a day. In the finishing mills also the local labourers have risen from ordinary coolies to being mates and mixer-men earning from Rs 50 to Rs 60 a month.

These three departments may be regarded as the essential departments, but there are a number of others. The coke ovens in which the coal is treated on arrival at the works and by-products extracted in the shape of tar and ammonia sulphate employ just under 1,000 persons. There are a handful of skilled foremen and under them more or less unskilled labourers, such as quenchers on 10 annas or 11½ annas a day. A number of women, Hos and Santals, find employment here as shovellers at which work they are better than men. The electrical department also employs just under 1,000 hands but here the work requires a higher degree of skill. Amongst the fitters Kamars, Sikhs, Muhammadans and Brahmans are important and amongst the electricians Brahmans and Kayasths. The pattern shops, in which the most highly skilled carpenters are found, employ over 200 men. The most skilled of all are the Chinamen of whom there are 20 on Rs 3-9-0 a day, while Indian carpenters, most of them Barhis, earn from Re 1-8-0 to Rs 2-3-0 a day. The foundry employs about 1,000 hands in this department the moulders of whom about half are Muhammadans, earn from 14 annas to Rs 2-5-9 a day while their helpers earn from 7 annas to Re 1-1-3. In the mechanical department also, especially amongst the fitters, Muhammadans are numerous and Sikhs, but Brahmans, Kamars, Kurmis and Rajputs are also important.

The "Greater Extensions", as the new furnaces and mills still under construction are called, employ over 5,000 men. In the works as a whole the castes that provide most of the skilled workers are Muhammadans (1,936), Rajputs (1,008), Brahmans (897), Kayasths (729), Kamars (395), Sikhs (336) and Goalas (311) and amongst the unskilled Tehs (1,826), Mundas (1,329), Muhammadans (1,070), Goalas (657), Santals (589), Rajputs (428), Bhumij (397), Hos (393) and Tantis (367) in that order.

226 The manufacture of glass tiles, bricks and earthenware supports 22 Order 10—Ceramics millions of persons, the village potters forming about 85 per cent of the total. The number of potters has dropped by about 93,000 since 1911 but there has been an almost corresponding rise in the number of brick and tile makers. As was remarked at the last census earthenware vessels are being widely superseded by vessels of metal, while the expansion of the building industry doubtless increases the demand for tiles and bricks. Potters are found in large numbers in Bengal, Bihar and Orissa, Bombay, Madras, the Punjab, the United Provinces, Hyderabad and Rajputana. They mostly belong to the Hindu caste of Kumhars and their women take an important share in the industry.

There are 1 085 factories shown altogether under this general head. Of these

Establishments 20 and over

Head	No of Establishments		No of Employés	
	1921	1911	1921	1911
Bricks and Tiles	762	411	71 607	46 156
Glass	53	37	3 401	1 363

986 are establishments manufacturing bricks, tiles and firebricks and employ 75,000 persons. No less than 412 of these factories are in the Bengal Presidency, 179 in Bombay and 117 in the United Provinces. Brick making is a seasonal occupation and as it is at its height in the dry season the census towards the end of

March probably catches the maximum numbers. Messrs Burn & Coy have large pottery works in Raniganj and another in the Central Provinces. There are ten glass factories in Bombay, six in Bengal and others in the United Provinces, Punjab and elsewhere, but the 29 glass establishments between them only employ 2,600 persons and the industry has still to be developed. The comparative figures for 1911 and 1921 for factories of bricks and tiles and of glass are shown in the margin.

Order 11—Chemical
Products

227 The general occupation figures show that 12 million persons are supported by the industries under this head. Of these 11 million are concerned with the manufacture and refinement of vegetable oils. Under both the major and minor head the figures have declined since 1911. The provinces most concerned with the oil industry are the Punjab Bengal the United Provinces and Bihar and Orissa and the numbers have risen in the first two and declined in the second two the variations probably having no important significance. The main heading includes a large number of small industries connected with the minor necessities and luxuries of life, salt soap candles, drugs, perfumes, matches, arated water lac and so forth, and the industrial schedules show that, even excluding the smaller establishments of less than 20 persons, the number of persons employed has more than doubled, having risen from 49 to 102 thousand in the decade. The details of these various industries are not of general interest and can be studied in the tables when they are required. Nearly a third of the total number of persons employed belong to the petroleum refineries of Burma. There are 435 vegetable oil mills in different parts of the country employing over 16 000 persons and the number of small oil refining plants which do not come into the schedules must of course be very large. 201 salt refineries with over 13 000 workmen, of which the majority are in the Bombay Presidency and Rajputana. Of the 175 factories of *harra lac* and *cutek* employing over 13 000 persons 121 are in Bihar and Orissa and 43 in the United Provinces and Central India. The manufacture of drugs occupy about 5 000 persons, chiefly in Bengal and the Government ammunition factories employ 6,000 persons.

Order 12—Food In-
dustries.

228 Food industries occupy 31 millions of the population, the number having decreased by nearly 17 per cent. on the 1911 figures. Some of the principal figures are given in the margin. The rice and flour workers and grain parchers form rather more than one-half of the total number under this general head and have declined by about one-fourth in the decade. The rice and flour grinders are mostly in Bengal Bihar and Orissa, Burma, Madras and the United Provinces.

The hand industry is largely being superseded by mills, the number of flour and rice mills returned in the industrial schedule being 1 300 of which 391 were in Burma 369 in Madras, 186 in Bombay and 144 in Bengal. Of the 50 000 persons employed in the industry 22 000 are employed in Burma alone and these mills are there numerically the most important industry after the petroleum refineries. Writing of these mills Mr Grantham remarks—

The rice mills too vary very much in size from small mills of 10 to 20 employes to the largest with 1,000 but most differ from petroleum refineries in belonging more peculiarly to the province and they include large numbers of mills of small and moderate sizes independent of European capital. It cannot be said that they are universally flourishing. A note on rice-mill in the Prome, Shwabo and Mandalay Districts was written by Mr H. O. Reynolds, I.C.S. in September 1921 after an enquiry prompted by the desire of the Government of India to obtain an industrial survey with the census of 1921. His principal conclusions were as follows—

Prome District—The older mills which are not heavily in debt may continue to make a sufficient profit to maintain the miller and his family in comfort, but it is more. Many of the new mills which are such of the old mills as are heavily in debt, are likely to be worked at a loss. There are too many mills already and no scope for any more.

Shwabo District—There is no room for any more mills and it is a question whether there are not rather more than there is room for already. It seems not unlikely that several of the mills which commenced operations only in 1921 will go under at the time of the enquiry they were either being worked at a dead loss or were closed altogether.

Mandalay District—Owing to the gradual cutting off of the Shwabo supplies of paddy the best day for rice-milling in Mandalay is over. The paddy from the parts of Mandalay District which are irrigated by canals will always be available and the local demand for rice must remain considerable but the mill is already too numerous even for this, while the prospects of the larger mill exporting down the Irrawaddy are poor unless they can retain at least the milling of paddy from the Katha District.

Next to the rice and flour mills the 519 sugarcane factories occupy the largest number of workers, namely, over 22,000. Of these the United Provinces has 211 with 6,000 workers Bombay 113 with 3,300 and Madras 14 with about the same number of employes. Opium tobacco snuff, cigarettes and condiment

Industry	Persons Employed in 1921	
	1921	1911
Total	3,300	6,718
Rice and Flour	1,300	1,871
Cereal Parchers	100	100
Total, Grinders	1,400	2,071

factories are 439 in number, employing 21,000 persons. The largest number, 164, are found in the Central Provinces with 7,679 employes and of these 133 are small tobacco (*biri*) factories in the Bhandara district employing together 6,440 persons.

229 The industries of dress and toilet support nearly 7½ million persons the

Order 13—Industries of dress and the toilet

Industries	NUMBER (000 & OMITTED)	
	1921	1911
Total	7 425	7 751
Tailors	1 254	1 273
Boot and Shoe Makers	2 076	2 128
Washermen	2 000	2 125
Barbers	2,019	2,140

details of the principal industries for 1911 and 1921 being given in the margin. The number under the general heading has dropped by just over 4 per cent. The main category includes such important functional groups as *darzis*, *mochis*, *dhobis* and barbers. Of these *darzis* are most numerous in Bengal, Bombay, the United Provinces, Punjab and Hyderabad State. There are more than half a

million shoemakers in the Punjab alone and over a quarter of a million in Madras and the castes occupied in leather work are, as we have seen, common throughout India. There is one *dhobi* in every 80 persons in Madras, one in every 62 persons in Hyderabad State. Barbers are most numerous in Bengal, Bihar and Orissa, Bombay, Madras, the Punjab and the United Provinces. As is natural the organized industries, of which there are in all 407 employing about 12,000 persons are chiefly found in the Presidency towns and other large cities such as Cawnpore. About one-sixth of the managers and one-fourth of the clerical and supervising staff are Europeans and Anglo-Indians, and practically all the labour is male.

230 Of the 1,754 thousand persons supported by building industries one-

Order 15—Building Industries

Industry	NUMBER (000 & OMITTED)	
	1921	1911
Total supported	1,754	2,082
Lime burners	76	51
Excavators and well sinkers	372	368
Stone-cutters	221	1 204
Bricklayers	875	
Others	210	349

third belong to Madras and another third are distributed between Bengal, Bombay and the Punjab. The comparative figures of the principal groups are given in the margin, but it is probable that there is a considerable amount of cross classification, though the increase in the numbers engaged in lime-burning is no doubt real. The industrial schedule shows 417 establishments with nearly 30,000 employes. Of these 295 establishments and over 18,000 employes belong to lime works

and kilns, the comparative figures of which are (excluding the small establishments) 53 establishments, with 7,630 persons in 1911 and 210 establishments with 16 992 workers in 1921, the largest number being employed in the Punjab, Bombay and the United Provinces, while the cement works of the Central Provinces have now over 2,300 workers and are rapidly developing.

231 Miscellaneous industries of different kinds not hitherto classified support 3 4 million persons, 1 7 being workers in precious stones and 1 4 sweepers and scavengers. The former have decreased by about 5 per cent. These industries are mostly unorganized. Of the 958 industries of luxury employing over 56,000 persons more than three-fourths are printing presses, with nearly 50,000 employes, the remainder being inconsiderable industries with small establishments mostly connected with the manufacture of objects of art or sport or scientific instruments. Of the 1,377 thousand sweepers and scavengers no less than 1,028 thousand were returned from the Punjab, the United Provinces, and Rajputana, where the members of the large sweeper castes have often doubtless been returned under their traditional occupations whether they still pursue it or not, variations in the periodical figures being largely ascribable to this uncertainty.

Order 18—Other miscellaneous Industries

232 Transport by rail, road and water supports 4 1 million persons or 132 in

Sub class IV—Transport

Head	NUMBER (000 & OMITTED)	
	1921	1911
Total	4,331	5,029
By water	745	983
Boat Owners	454	594
By Road	2,146	2,782
By Rail	1,232	1 062
By post	203	202

ten thousand of the population of India. The comparative figures under some of the principal heads are given in the marginal table. Owing to the fact that the heading includes labour the figures must be taken with some caution, since the labour employed is a fluctuating quantity and the figures are influenced by the variation in the unclassifiable returns placed in group number 187. Three quarters of those supported by water-transport belong to Bengal, Bombay and Burma and about

ly interchangeable in so large a number of cases. For this reason and also because of the fact that most shopkeepers sell a wide assortment of articles and their classification is therefore somewhat arbitrary and because there exists a large indefinite category of "general storekeeper and unspecified shopkeeper," which renders the other figures correspondingly indefinite, it is not worth while to scrutinise in detail the comparative figures. We may notice the varying importance which trade has in supporting the population of different Provinces. As is natural the bankers and financiers are most numerous in Bengal, Bombay, the Punjab and the United Provinces where the large commercial centres are found. But it is not the large trading concerns, for which figures can be found in the published statistical returns, that are of most account from the point of view of the population supported or occupied, but the vast net-work of rural trade which is spread over the small distributing towns, and the country bazaars and fairs and it was thought that an attempt might be made in connection with the census to obtain some information as to how this distributing organization functions in rural areas. A considerable amount of information has been collected from different parts of the country. Circumstances differ widely in different parts of India and it would be impossible to combine the information into a general account of the rural trade, while only a small portion of the reports can be reproduced here. It may however be stated generally that in the Eastern Provinces just as there are no villages, so there are no small towns and consequently a comparatively small number of permanent shopkeepers and the larger part of the exchange of articles ordinarily required by the household is carried out by the cultivators and producers themselves at the periodical country markets without the intrusion of any middleman. In the rest of India on the other hand and especially in Burma where the general store is a feature of every village and contains every variety of goods the larger villages and small towns have permanent shops and dealers who form the framework of the distributing organization, supplemented by the more casual exchange of produce brought to the market by the producers themselves. Mr Thompson (Bengal) writes as follows about rural trade —

"In rural Bengal shops are practically non-existent. One may go miles along main roads through some of the most thickly populated parts of the country and see none. But *hât* / *hola*, market places, are more frequently met with. Commonly there are two market days in the week and on the other days the place is deserted, though an important *hât* may have a permanent shop or two. *Hâts* are scattered so profusely over the country that a cultivator in almost any district can go to one every day of the week without going more than 5 or 6 miles from home. As often as not he does not go for business. In fact the *hât* is as much a place of recreation as a place of trade and cultivator has less work to do more time to waste in company with others than almost anywhere else in the world. Where there are daily bazars they commonly have two days a week which are *hât* days on which the bazar is much better attended than on other days.

In these plains districts there are 6,786 *hâts* to a male population over the age of 15 of about 14½ millions. If, therefore, every male aged 15 and over went to market one day a week it would produce an average attendance at the bi-weekly *hâts* of only just over 1,000 at each. Those who have seen the crowds that do attend *hâts* in rural parts of Bengal will realize that they are very often several times as numerous as this and that the figures prove that the average person aged 15 and upwards goes to market more than once a week. The existence of so many markets so well attended means that the supply of commodities, which are produced on the land and change hands between one cultivator and another, is kept very much in the hands of the cultivating classes themselves. They employ no *entrepreneur*, and in this fact lies the explanation of the small proportion of the population occupied in trade in Bengal compared, for instance, with the proportion in European countries. There is in this country very little retail trade in agricultural produce and what there is, is carried on in towns only. There is of course a certain amount of collecting trade by dealers who buy up jute, rice, betel-nuts, chillies, etc., in rural markets and bring them into the towns or forward them to Calcutta, but as elsewhere collecting trades and wholesale trades employ fewer persons than distributing trades and retail trades dealing with equal quantities of commodities would employ.

Trade in food-stuffs supports 1,534,256 out of the 2,439,859 supported by trade of all sorts, 62.8 per cent. The number has increased 10 per cent since 1911, but the increase is more apparent than real and has arisen because some 100,000 of the people who catch and sell fish on this occasion seem to have preferred to return themselves as fish dealers, who in 1911 returned themselves as fishermen. There has been some increase, though a much smaller one, produced in a like manner in the figures for sellers of milk, butter, ghee, etc. 121,584 persons are "general storekeepers and shopkeepers otherwise unspecified" and their dependents

Few of these are general storekeepers, for the village shop which as in the country in England sells all manner of things is not wanted in Bengal where agricultural produce is exchanged in the open-air markets and these are visited by itinerant dealers in the piece-goods, bangles, kerosene oil, etc. which make up most of the cultivator's wants not supplied by the land."

In regard to Assam Mr Lloyd writes —

Excluding very petty and minor *Adis* a total number of 89 regular market or bazars has been reported from the provinces (British territory only) but this excludes two subdivisions for which no numbers have been given, and number of tea-garden bazars which have been omitted in some district reports. Practically all of these are distributing centres for various kinds of imported goods, as well as markets for rice and fresh food products of the neighbourhood. Generally there is no single village shop stocking all kinds of articles. Where there are permanent shops they are usually two or three selling different kinds of commodity and owned by different houses of trader. For instance there may be a Marwari cloth shop an upcountry man selling groceries or grain and pulses, and a Dacca Muhammadan dealing in miscellaneous or fancy goods. Most of the headquarters market sit daily for sale of fresh produce such as fish and vegetables when the attendance is not large—perhaps 400 or 500. Weekly or bi-weekly however there is a bazar day proper when trade is much brisker and the attendance becomes often 1000 or 3000. In the Brahmaputra Valley Cachar and the Hills there is a considerable number of Municipal, Local Board and other publicly owned markets. In Sylhet all are privately owned. Of the 89 regular markets reported, 60 are under Municipal or Local Board control and 119 under Government or other public ownership. The last number includes many *Adis* owned by Europeans in the Khasi Hills.

The annexed statement shows for certain districts the area and population served by rural

District.	Actual number of <i>Adis</i> .	Number of markets per 10,000 population.	Percentage number of population served by market.
Goalpara	114		84
Lakhimpur	41		84
Darrang	27	22	81
Assam (Province)	48	22	86
Upper Assam	18		77
Patkai	213		84
Khasi and Jaintia Hills	96	42	84
Garo Hills	27	18	

markets of all classes. The Sylhet total excludes Karingpuri Subdivision from which no report was received, and some tea-garden *Adis* have been omitted, but the figures serve for rough comparison. It will be noticed that the Surma Valley market serve a smaller area and population than do those of the Brahmaputra Valley. The Khasi and Jaintia Hills and Garo Hills have numbers of regular markets but in the other hill districts they hardly exist. The families are generally self-supporting and when any commodity runs short it can be borrowed from a neighbouring household until the next harvest. Only about 30 of the regular

markets are daily. Of the rest rather more than half sit bi-weekly and less than half weekly. In the Khasi Hills weekly fairs means every 8th day and bi-weekly every 4th day. A few sit 3 times a week. At most of the regular markets every necessity and a good many of the luxuries of life can be bought and sold. In a poor hill, forest or frontier area special products such as spears, raw cotton, lac and other forest produce are dealt in. Dogs are sold (males for eating females for breeding—price from Re. 1 to Re. 3) at Mokokchung in the Naga Hills and at Lakhimpur bazar in Cachar. As at Damra in Goalpara a market attended by the Garos. Generally however rice and other agricultural produce, fresh and dried fish, vegetables and fruits, salt and groceries tobacco and betel, oil and *gau* cloth and yarn, implement and utensils, fancy and miscellaneous articles are the things to be found in all markets. For immediate comfort parched or fried grain, sweetsmeats and sometimes tea, milk and sugar may be had. In parts of the Khasi Hills tea shops are speciality. At Para Bazar (Shillong) it has been calculated that there are 40 tea stalls, each serving on an average of 48 cups of tea. The Khasi women and girls make a profit of about 9 annas from each tea shop or stall on the market day. But let and mats are sold to some but not to all markets and live-stock especially cattle only at certain important ones. Where milk is sold, there is sometimes one price for pure and another for adulterated milk. For instance in Darrang 1 anna a peer is paid for good milk while some is so much watered that it fetches only 5 pice a peer. In some markets Nepalese dairymen are able to sell their ghee for Rs. 3 a peer and also to get 3 annas a peer for skimmed and watered milk.

The attendance varies from 100 or even less to about 4000 but it is rarely over 1000 at rural *Adis*. The traders are of different houses according to locality. Local agricultural produce is sold generally by the growers and forest produce by hillmen, although these things may be stocked by shop-keepers of other classes also. Cloth and other imported articles are sold in the Brahmaputra Valley by Marwaris, Dacca Bengalis, upcountrymen and local Assamese, the share of trade being generally in the order named. In the Surma Valley and the Hills local people have more of the retail trade in their hands. Very few new commodities have appeared lately. *Charas* generally of local and are sold in many markets as a result of the non-co-operation movement. At Mankachar in Goalpara *charas* costing 10 annas for the wood and tanning days make were priced at Rs. 2 each. Curious to relate, the name of the movement leader among whose articles of faith are the eschewal of luxuries and of foreign

goods, is used as an advertisement on the Gandhi brand of cigarettes (Indian made) and Gandhi matches (Japanese). Japanese cloth and fancy goods have made great strides, doubtless owing to cheapness. For instance, cloth from Japan was introduced into the Khasi Hills in 1916-17 and its sale now amounts to 25 and 35 per cent of the total cloth in Shillong and Jowai Bazaars, respectively. American goods have not gained a very strong footing—as regards the smaller articles—but in some bazaris of Sib-sagar they are said to cover some 15 per cent of the miscellaneous stationery and fancy goods trade. Generally Japanese things of this class predominate, and Indian and British made articles are only from 15 to 30 per cent each of the total. Stocks in remote shops are generally sufficient for several months, but as a rule stocks of cloth and dry goods are not kept for more than one to two months' needs. For grain a fortnight's supply is usual. The turnover in large permanent shops may amount to several hundreds, or even thousand, of rupees in a week. Thus a cloth shop in Lakhimpur (Cachar) has a turnover of Rs. 100 with a profit of 2 annas in the rupee; a brass shop turned over Rs. 300 at 1 anna in the rupee profit per week; a grain shop at Doom-Dooma sold Rs. 1,700 worth with 1 anna per rupee profit in a week; a miscellaneous goods shop at Dhubri turned over Rs. 750 worth of goods at 8 per cent profit. The smaller stallholders and produce sellers make generally higher profits for their small stock-in-trade; a dried fish seller makes 6 annas per rupee on total sales of 5 rupees and a nut seller 2 annas on the same value of stock, per market day at Lakhimpur. Generally profits of the retailer vary from 1 anna to 1 annas and sometimes 6 annas in the rupee. Such profits are in addition to the wholesaler's profit on his sale to the retailer, but shop or stall rent and establishment charges have to be paid out of the retail profit. The profit made on sale of a tin of kerosene oil varies from the mere value of the empty tin (6 to 9 annas) to 25 per cent plus the tin. Small shopkeepers generally obtain their stocks from larger local merchants—rarely from a distance—at a more favourable price than the large man charges to the public. Hence the small man is, as a rule, not being crushed out by the big seller. For a few markets the larger shopkeepers send out stocks for sale on bazar days from their main shops, and here the small trader suffers somewhat. Accounts kept by the smaller shopkeepers are of the roughest and often none at all are kept. Trade agents are generally only employed by large buying firms at special seasons for special crops, e.g., for cotton from the hills and lac from the hills and lower Assam, and for jute and mustard. Traders from Bengal come in boats and buy quantities of rice from the interior in the Surma Valley after the winter harvest. Generally all products for export are bought by the regular Kayas or Marwari traders of the Brahmaputra Valley. Frequently money is advanced on the standing crops, and although the cultivator obtains a temporary convenience by this ready money, he has to pay dearly for it."

In Bihar and Orissa Mr. Tallents finds that there is one market for every 29 square miles and every 11,700 persons. Of the method by which the cultivator disposes of his surplus produce he writes—

"The extent to which the ordinary food grains change hands at the markets differs in different parts of the province. In South Bihar when the grain is threshed and lying ready on the threshing floors, the local dealers or *beparis*, who very often belong to the Teli caste, visit the threshing floors with their pack-bullocks or, where roads are passable for carts, with their carts. Sometimes they come alone, but more usually they come in twos and threes. This affords scope for the congenial occupation of bargaining, each party trying to make the best bargain for himself at the expense of the other cultivators and *beparis* that he can. It is customary for the *bepari* to pay cash down before removing his purchases, but, if he is a man with a well-established local reputation payment is sometimes deferred. These sales take place as soon as the grain has been threshed and is ready to be moved. In North Bihar on the other hand reports show that most of the crops change hands not on the threshing floors but at the markets, and in Orissa, where there is a superstitious dread of selling crops from the threshing floor, they are sold either at the markets or at the *golas* described below. The chief function of the *bepari* in Orissa in regard to the crops is their retail sale. In Sambalpur the first hands through which the crops pass after leaving the cultivator are those of a class of women called *lochnis* whose profession it is to collect and clean the grain before bringing it to the smaller dealers. The *bepari* is usually the owner of a small shop in which he stores a part of the grain he has purchased for local retail sale—for instance, in the case of paddy he will buy in February or March and sell locally about the break of the monsoon in June when the price is beginning to rise. But the financial resources of the *bepari* are limited and the greater part of his purchases will probably be passed on to a *goladar* or *arhatia*. The relations of these two classes of middlemen differ, in some cases the *goladar* acts as the agent of the *bepari* and stores and disposes of his grain for a commission, in some cases the *bepari* sells outright to the *goladar*, in other cases the *bepari* takes advances from the *goladar* and acts as his agent. The export trade of the district is generally centred in the hands of a small ring of big *goladars*, usually Marwaris, or in Orissa Muhammadan Kachchhis, who pass it up-country to the United Provinces or beyond, or in the other direction to Bengal and Calcutta or Madras.

In general terms therefore it may be said that the cultivator takes no part in and gets none of the profits that are made out of the marketing of the produce of his fields. The risks of the local trade are shouldered by the *beparis* and *goladars* and the profits of it are shared by

them when the grain travels further afield the trade passes into the hands of a set of more substantial middlemen whose resources and whose outlook are larger and whose market is the whole of India. These generalizations of course need qualification to make them fit the facts. Two opposite tendencies can be traced which tend to upset the arrangement described. The professional middlemen are not the only persons who realize that there is a good thing to be made out of holding up the grain for a favourable market, and not infrequently the landlords and the more substantial cultivators who can afford to do so and who have the necessary storage room and their own local marketing especially in Orissa it is said that the persons who control the local market are not class apart, but the landlords and the richer cultivators themselves. In this manner the cultivator is extending his operations into the province of the middleman.

In the United Provinces a special detailed examination was made of certain individual markets. The results must be studied in the report. Of the rural trade in general Mr. Edyo writes —

As observed in the last report, in the ordinary way the maker of a commodity also sells it and the organization of rural trade is very primitive. To these markets the agricultural population brings its surplus grain for sale and buys with the proceeds those necessities which it does not provide itself—mainly cloth, salt and oil. In some barter still obtains. In prosperous times much money is also spent on small comforts which have not yet become necessities, and even on luxuries. It is in respect of these that the organization of trade is so rudimentary. In the ordinary way the wholesale or even the retail merchant who deals in articles other than of local origin himself journeys to the place of manufacture, and there obtains his stock. In consequence the rustic customer cannot dictate what he will buy but has to choose from very limited and arbitrarily selected alternatives. The rural merchant has little idea of looking for new commodities. Nor have manufacturers the enterprise to advertise their wares in new places. In one bazar it is to be seen a great show of glass bottles or of fancy waistcoats, in another none of these things, but a roaring trade is done apparently in walking sticks. At the moment tawdry rubbish of the Japanese variety is in much evidence everywhere. There would seem to be room for organizations to supply to the rural community simple commodities that it cannot provide for itself, and that will be really useful to it, with business methods of distribution through local agencies. Such organizations, of which there is at present little or no sign, would probably have the effect of reducing appreciably the proportion of the population engaged in trade.

The conditions in the Central Provinces are described as follows —

Perhaps to the foreigner in India one of the most striking things about the ordinary village is the absence of a shop of any kind. Cloth shops and sellers of groceries (*astrans*) and kerosene oil are to be found in the larger villages, but the vast majority of the inhabitants depend on the weekly bazar for the supply of any commodity which they do not grow or make themselves. In addition to being the centre for petty shop-keeping, the bazars are the centre of intercourse, and many attend them to talk and hear the latest news even if they have no purchases to make. Few villages are situated more than eight miles from a bazar village, and as each bazar supplies the petty needs of all the villages for which it caters it is self-contained and does not compete with neighbouring bazars but one dealer has to circuit and travels round from bazar to bazar the days of which are arranged to suit his convenience. He draws his supplies from a convenient centre and replenishes them as they become exhausted. Of the articles obtainable in the bazar the most important, perhaps, are groceries or *astrans* and cloth. Other commodities sold by the itinerant vendor are oil, grain and toys while shoes, bangles and pots are generally to be had from their makers, and country vegetables and fruit if in season, from the growers. The country people are very conservative in their needs, and the commodities sold in the bazars do not vary largely in a decade. Aluminium cooking vessels may be quoted as an instance of articles of recent introduction. As a rule transactions are in cash but, where as in the case of cloth, credit is sometimes allowed, payments may be made in grain. The petty traders however generally receive credit and pay the price of their goods thereafter together with the accrued interest after their stock is exhausted. They do not as a rule maintain accounts and it is seldom that the seller is a trade agent of a larger capitalist. The daily transactions naturally vary in volume with the prosperity of the locality and the articles sold. In Ukola it is said to range from Rs. 100 to Rs. 150 per day in Varanagar from Rs. 30 to Rs. 40, and in Drug from 4 annas to Rs. 10. In the latter case it is probable that profit has been confused with turnover. The bazars do not act as collecting centres for country produce except in so far as payments are made in grain, or in a few isolated instances, as in parts of Raipur where lac and other forest produce is brought to the market for sale. Apart from the petty weekly bazar the cultivator requires more important centres where he may purchase cattle, sell grain, cotton or timber, make his large purchases of cloth. There are generally several attil markets in each district which are held weekly but the more important fairs are held annually at religious festivals such as Rajas in Raipur, Panchaji in Nimar and Barmen in Varanagar. These continue for any period from a week to a month, and in some cases if

trade is good, may be continued longer. Cotton, grain and timber markets are found in convenient centres usually situated on the railway. Cotton markets in the Maratha plain country are highly organised and generally well managed. The price in Bombay is notified by telegraph and rapidly becomes known to all sellers and purchasers, and the wealthier cultivators frequently hold up their stocks for long periods in the hope of a rise in the market, and the official forecast of the American crop even is understood and discussed. In the rest of the province, however, the chief need is for some agency which will enable the cultivator to sell his crop at a time of the year other than that immediately succeeding the harvest, when there is almost invariably a considerable fall in price."

Of rural trade in Madras Mr. Boag writes —

"Except in the districts of Guntur, Nellore and Malabar periodical markets play a very important part in the collection and distribution of local produce and in bringing within the reach of the rural consumer necessities or luxuries otherwise procurable only in towns. The market, in fact, serves the same purpose for the rural area as a number of specialized shops do in towns. These markets are held at convenient distances to serve a group of villages and the days are so arranged that the same men may, as they often do, go on from the one market to another, purchasing and selling. The attendance varies with the importance of the market, and may range from 300 to 30,000. Markets are held once a week but the number of hours varies in different places. Almost every important market lasts for a whole day from 6 or 7 A.M. to 6 or 7 P.M., but the smaller ones last from 3 to 5 hours mostly in the afternoon. Prices are higher in the earlier hours of the market than in the later, and when the produce first comes to the market than at the time when in a favourable season the new year's fresh stocks are expected. Subject to these limitations prices are still to a large extent regulated by custom and this is almost always the case with articles like pots, coarse cloth, etc., etc., which are brought to the market direct by the producer.

Profits are variously estimated in various places but about 1 to 2 annas in the rupee seems to be the normal, profit on cattle rises sometimes to 25 per cent. In the smaller market profits appear to be a little higher than in the larger and retail sale usually brings in a large return to the vendor than wholesale. Retail sale is the rule but in the larger collecting centre merchants purchase articles wholesale. Retail sale is rare in exceptional cases, for cash in wholesale transactions credit is allowed. Barter is reported to prevail in a few areas in Ganjam, Bellary, Coimbatore, Ramnad and the Nilgiris, and bulls are reported to be exchanged in Chingleput and South Arcot districts. The commodities brought to the markets include everything necessary for daily life and also luxuries. A large part of it is local produce but produce of other districts, especially cattle are sent long distances when they command a large sale. Grain is brought in by the poorer ryot, the agent of the bigger ryot, or a merc trader. Vegetables, fruit and leaves are almost always brought by the grower, so also pots, coarse cloth, etc., by the maker, groceries and such things are usually brought in by the merchant.

Cattle more often than not by an agent, fresh fish etc. by the fisherman but dried fish by the merchant. Trade agents or brokers are employed in a few markets, but they are invariably employed for the sale of cattle. Cattle brokers are paid either by a commission on the sale value or at a fixed rate per head of cattle sold through them. The average area served by a market and the income derived by local boards

District	Area in sq. miles	No. of market	Amount of income derived by local board	Average area served by a market	Average income derived from a market
			Rs.	Sq. miles	Rs.
Codavari	254	49	3,824	52	772
Kistna	5,907	63	2,116	94	347
Bellary	6,713	50	10,084	114	220
North Arcot	4,051	58	18,732	8	323
Coimbatore	7,225	78	61,051	91	783
Ramnad	4,833	55	12,745	88	232
South Kanara	4,021	30	1,576	134	170

from them in certain districts are shown in the marginal statement

In addition to these markets held once a week, annual fairs and especially cattle fairs are held in various places of pilgrimage of local or general repute. The Madura and Tiruppur fairs are the most important instances, but there are many others. A report has been received of a special market for the employes in the railway workshops at Perambur near Madras. This market is held once a month on the day when the men get their pay. Provisions, etc., are taken out to the market from Madras and are sold for cash at rates which bring the sellers a profit of 12 per cent. Report says that the market is patronized by no one except the employes in the workshops, because of the high prices which are obtained."

Class C—Public administration and the liberal arts

234 The number supported by public administration and the liberal arts is 98 million persons. The marginal table below gives the principal figures and compares them with those of 1911. It is of interest to notice that the numbers supported

Public administration and the liberal arts.

under Public Force, and Public Administration form the insignificant proportion of 15·3 per mille of the population while the actual workers are considerably less than half that proportion. The considerable increase in the army is due of course to the war and of the total number returned 49 per cent. were enumerated

Kind	1902 POP. under 16	Variation since 1911
Public Force	5,175	— 8·9
Army	727	+ 6·8
Naval	—	— 67·4
Air Force	—	—
Police	429	— 7
Public Administration	3,644	—
Professions and Liberal Arts	4,961	—
Religion	5,488	— 4
Law	328	+ 30
Medicine	660	+
Instruction	608	+
Literary, arts, etc.	712	— 86·4

in the Punjab North West Frontier Province, Baluchistan and the States and tribal territory of the North-West Frontier Under the heading Police are included the very doubtful figures of village watchmen. These village servants belong to a class who generally have a small agricultural holding are accustomed to do agricultural and general labour and often have a traditional cottage industry such as cotton weaving, hide curing and basket-weaving. It is therefore very much a matter of chance which of these occupations they return at the census, and the great variations of the figures under this class at different censuses suggest that they are untrustworthy. The figures under this class have dropped from 1 007 in 1911 to 743 thousand at this census, but the variations in the different provinces are so irregular that the figures cannot be taken seriously. The fall in the numbers under Police amounting to about 6 per cent. is shared by most provinces except Bengal and Burma. Under Public Administration are included the administrative officers and officials of the administrative and judicial service of the State of Indian and foreign States and of municipal and local boards and village authorities. The heading does not, however include a number of officers and officials such as engineers, doctors, schoolmasters and so forth who have specific occupations of their own which give them another place in the classification scheme. The fall in the total figure is somewhat misleading as it is confined to the group of village officials and servants other than watchmen, where the figures, which for the same reason as in the case of the village watchmen are of doubtful value, have declined from 1 005 to 727 thousand. The numbers in the other groups of state employees combined has risen by 17 per cent. since 1911 the rise being fairly evenly distributed. An interesting feature is the rise in the number of females employed from 7 to 37 thousand in Hyderabad State where it is explained that a number of women are employed by the C I D Police and as village watchmen. Under Religion the figures are subject to considerable variation according as the numbers in the large class of "mendicants" are classified under this head as religious mendicants or under order 35 as ordinary beggars and vagrants, but the fall seems to have been shared by all the groups under the heading of Religion, including priests and temple servants. The small rise in the numbers supported by the legal profession is practically confined to Bengal, Bombay and the Indian States. In Hyderabad State alone the numbers have quadrupled, having gone up from less than 7 000 to more than 27 000 and the rise in Mysore and the southern coast States is considerable. Medical practitioners have increased from 437 to 488 thousand, but the somewhat indefinite class of vaccinators, compounders, midwives and so forth has decreased. Midwifery is of course a subsidiary profession of certain low occupational castes and the return is therefore likely to be untrustworthy. The order Instruction has been expanded into two groups showing separately the professors and teachers on the one hand and the clerks and servants on the other connected with instruction, the latter constituting about 8 per cent. only of the whole number. The increase in the numbers is specially large in the Indian States, being 68 per cent. there as compared with less than 10 per cent. in British territory. The numbers have more than doubled in Hyderabad State and have risen by more than one-third in the other states of South India and in Baroda. Some statistics of the increase in the number of schools and colleges have already been given in Chapter VIII (Literacy). Under professions and liberal arts the most important heading is that which contains musicians and actors of whom with their dependants, there are 406 against 689 thousand in 1911 the decline in the numbers being noticeable in all provinces. The profession contains the large dancing-girl class which can be otherwise classified but the fall in the number is probably due to restriction in amusement in a year of economic stringency. The number of those supported by journalism and other kindred professions has declined from 120 to 101 thousand.

MAPHAM SHOWING THE DECEMBER NUMBERS EMPLOYING 10,000 OR MORE PERSONS IN INDIA 1911.

MOTOR CAR WORKS	10,878
TANNERIES	10,406
JUTE PRESSSES	11,348
GAS & ELECTRIC WORKS	11,707
RUBBER & LATEX FACTORIES	12,100
SALT MANUFACTURES	10,100
BRASS, TIN & COPPER WORKS	14,000
RAIL MILLS	10,183
RUBBER PLANTATIONS	17,000
MARGARINE WORKS	17,777
ROPE MILLS	10,000
LIME KILNS	10,043
IRON POWDERWORKS	10,047
SPINNING, TWISTING & COMBING FACTORIES	20,048
SAW MILLS	20,700
ROPEWORKS & ROPE TWIST WORKSHOPS	21,070
COAL MINES	21,000
WEAR FACTORIES	21,000
STEEL & IRON WORKS	22,470
PETROLEUM REFINERIES	22,224
IRON & STEEL WORKS	20,400
COFFEE PLANTATIONS	40,000
PRINTING PRESSES	40,070
FLOUR & RICE MILLS	40,001
BRICK & TILE FACTORIES	70,000
METAL AND ENGINEERING WORKSHOPS	21,001
COTTON GINNING & PRESSING MILLS	22,000
RAILWAY WORKS	112,032
COLLIERIES	201,004
JUTE MILLS	227,030
COTTON SPINNING & WEAVING MILLS	220,070
TIA PLANTATIONS	
7,000	

Class D—Miscellaneous

235 This class contains a number of orders and groups which are incapable of being classified under any one definite head Miscellaneous occupations.

Head	1921 000's omitted	Variation + or —
<i>Miscellaneous</i>	19 402	+ 8 8
Persons living on their income.	480	—11 1
Domestic service	4,570	— 0 6
<i>General Terms</i>	11,099	+20 1
Clerical	1 344	+73 0
Labourers	9 800	+12 4
<i>Unproductive</i>	3 253	— 6 7
Jails and Asylums	145	+ 9 6
Beggars and prostitutes	3 021	— 8 9

force in the cities and number

General Terms

Group.	Number 000's omitted	Variation + or —
Total Order	11,099	+20·1
Manufacturers and business men, etc.	888	+200·1
Clerks, etc.	1 344	+ 73 1
Mechanics	87	+ 38·6
Labourers	9,800	+ 12·4

and business men, clerical establishments, mechanics and labourers. The variations in these different groups are distributed very irregularly over the different provinces, the number of unspecified labourers being particularly high in Bihar and Orissa, Bombay, the Central Provinces, Hyderabad and Rajputana and low in Bengal and the United Provinces as compared with 1911. The number of unspecified clerks has more than doubled in both Bengal and Bombay. The number of domestic servants returned has hardly varied in the figures of India as a whole. In Bengal, outside Calcutta city, there is one servant for every 24 households (occupied houses) and Mr Thompson draws attention to the contrast with conditions in England. Whereas the number of domestic servants in England and Wales has declined during each decade since 1881, the opposite has happened in Bengal, where the number rose by 28 per cent between 1901 and 1911 and has risen by 31 per cent in the last decade. The motor drivers and cleaners form a new group and were returned at nearly 42 thousand, of which about two-fifths belong to Bombay. The number in Bengal (1,838) is evidently inaccurate and the group of unspecified mechanics probably contains a considerable number of this class of worker.

Section III—The Industrial Census

236 The various tables in which the returns of the special industrial census have been tabulated are as follows — Main features of the Statistics.

Imperial Table—XXII Part I—Industrial Statistics, General Statement

Part II—Distribution by Provinces, States and Agencies

Part III—Particulars as to ownership and management of the more important industrial concerns in the various Provinces and States

Parts IV and V—Particulars of skilled and unskilled workmen by certain selected industries in the various Provinces and States according to religion and birth

Part VI—Details of power employed

Part VII—Number of looms in use in textile establishments

Subsidiary Table—VIII—Distribution of industries and persons employed

IX—Particulars of establishments employing 20 or more persons in 1911 and 1921

The establishments have been classified under 16 main heads and divided in Part I of Table XXII, (a) according to whether they employ mechanical power or not and (b) according to the number of persons they employ. Many have already been dealt with individually in considering the industries to which they belong, and it remains to make a general survey of the chief features which this particular census has exhibited regarding the organized industrial employment of the population at the present time.

The definition of industrial establishment adopted was sufficiently wide to

Industrial class	Number in 1907 a.	Per centage.
All Industries	5,661	100
I.—Government of Special Products	642	11.3
II.—Wines	26	0.5
III.—Quarries of hard rocks	30	0.5
IV.—Vegetables and connected Industries	772	13.6
V.—Textile and Jute Industries	10	0.2
VI.—Wood, etc. Industries	130	2.3
VII.—Metal Industries	82	1.4
VIII.—Chemical and Latheries	100	1.8
IX.—Food Industries	75	1.3
X.—Fertilizers and Chemical Products	75	1.3
XI.—Fertilizers of Dyes	80	1.4
XII.—Fertilizers of Dyes	80	1.4
XIII.—Fertilizers connected with Fertilizers	10	0.2
XIV.—Construction of House of Transport and Commercial	10	0.2
XV.—Fertilizers, application and transmission of Physical Forces	10	0.2
XVI.—Industries of Lumber	10	0.2

include all factories of any importance in the country while excluding small and petty undertakings like village oil presses, small rice pounding plants or petty tailoring establishments. Except in regard to power the enquiries were confined to the details of the personnel employed questions of wages, out turn, working hours and conditions of labour being considered irrelevant and in any case impossible to obtain under the conditions in which the enquiry was undertaken. The total number of establishments returned in India was 15 606 employing 2,681 125 persons 1 994 314 males and 686 811 females. The distribution of the working population in

the main classes is given in the margin.

Taking the individual industries the most important are the tea gardens

Industrial class	1911		1913	
	No.	Percent	No.	Percent
—Government of Special Products	5,661	31.340	1,067	6.10,467
II.—Wines	26	0.001	1,067	0.001
III.—Quarries of hard rocks	30	0.001	1,067	0.001
IV.—Vegetables and connected Industries	772	4.844	1,067	6.10,467
V.—Textile and Jute Industries	10	0.001	1,067	0.001
VI.—Wood, etc. Industries	130	0.001	1,067	0.001
VII.—Metal Industries	82	0.001	1,067	0.001
VIII.—Chemical and Latheries	100	0.001	1,067	0.001
IX.—Food Industries	75	0.001	1,067	0.001
X.—Fertilizers and Chemical Products	75	0.001	1,067	0.001
XI.—Fertilizers of Dyes	80	0.001	1,067	0.001
XII.—Fertilizers of Dyes	80	0.001	1,067	0.001
XIII.—Fertilizers connected with Fertilizers	10	0.001	1,067	0.001
XIV.—Construction of House of Transport and Commercial	10	0.001	1,067	0.001
XV.—Fertilizers, application and transmission of Physical Forces	10	0.001	1,067	0.001
XVI.—Industries of Lumber	10	0.001	1,067	0.001

with 23 per cent. of the workers the cotton industry with 16 per cent. jute with 12 per cent. coal with 7 per cent. railway works 4 per cent. bricks and tiles 3 per cent. vegetable oils and petroleum 2 per cent. printing presses 2 per cent.

In comparing the figures with those of the special census of 1911 it is necessary to exclude establishments employing less than 20 persons. The marginal statement shows the growth of the figures under each main head and some of the principal industries. The progress in mining metal textile industries and industries connected with transport is specially noticeable.

Nature of ownership

237 Of the total number of 15 606 establishments 677 are owned by Government 3,202 by registered companies and 11 637 by private persons. The Government owned concerns are mostly railway and engineering workshops and other concerns such as brick and tile factories connected with the construction of roads and building and printing presses. The tea and rubber plantations are mostly the property of companies. Out of the 793 tea plantations in Assam 632 belong to companies. On the other hand the coffee plantations of Madras which are much smaller concerns than the tea gardens, are mostly privately owned only 23 out of 127 belonging to companies in Madras and 10 out of 242 in Mysore. The collieries are mostly company owned 3 but of the 42 manganese mines of the Central Provinces half are owned by companies and half by private persons. Of the 39 cotton spinning mills in Bombay 233 are private owned but of the cotton weaving mills 170 out of 345 are owned by companies. Similarly the jute presses are mostly private while 60 out of the 62 jute mills of Bengal are company owned. Practically all the printing presses are private concerns, and so are a large number of the general workshops and such concerns like flour and rice mills and brick and tile works which are mostly on a small scale. European companies own the majority of the tea gardens of Assam and Bengal but as has already been seen Indian enterprise is growing in regard to the private ventures. Indigo in Bihar and Orissa, coffee in

Rubber and rubber in Travancore are mostly in European hands but the coffee plantations of Mysore are largely owned by Indians. Most of the large collieries of Bengal are held by European companies, but 65 out of the 73 private concerns belong to Indians. The cotton industry of Western India is almost entirely Indian while the jute mills of Bengal are in European hands though the small presses are mostly owned by Indians. The rice and flour mills and the brick and tile factories with the exception of a few large concerns, are in the hands of Indians.

238 The details of the personnel are given in Parts I and II of the Industrial Tables. Of the total number of 2,681 thousand persons 123 thousand belong to the directing, supervising and clerical staff, 721 thousand are skilled workmen and 1,829 thousand are unskilled labourers. The corresponding proportions per 1,000 are 46, 271 and 683 and the proportions in 1911 were 33, 261 and 703 respectively. It will be of interest to consider in more detail the nature of the personnel in each category.

239 Of the 11,863 managers less than a quarter of the number are Europeans or Anglo-Indians. As is natural the larger European owned concerns usually have European managers and this is the case with the tea gardens of Assam and Bengal, the coffee and rubber plantations of South India and the collieries and large mechanical workshops and printing presses where a high grade of special technical training is required and considerable staff of Europeans is employed. Of the cotton mills in Bombay only about one-tenth have European managers. In the case of the supervising and technical staff Europeans and Anglo-Indians form about one-fifth of the whole number and of the clerical staff about three per cent. The tea, coffee and rubber plantations employ a good deal of European supervision, the number of Europeans being about 1 to 612 workers in the tea gardens while the collieries, manganese mines, oil mines and large metal works all require men with advanced European training. In the jute mills of Bengal there are 735 Europeans against 527 Indians in the supervising and technical staff and in the iron foundries of the same Province the Europeans are 135 to 103 Indians in this category, in the metal machinery and engineering works the proportion is 600 Europeans to 1,036 Indians while in the petroleum refineries of Burma the supervising staff is predominantly European the numbers being 503 Europeans to 54 Indians. In the cotton industries on the other hand the superior staff is predominantly Indian. In the 315 cotton spinning and weaving mills of Bombay, with their large staff of over 253,000 workers, the number of Europeans and Anglo-Indians employed is only 244 or less than 1 to 1,000 workers while the jute mills of Bengal employ a proportion of one European or Anglo-Indian in about 300 employees, the collieries one in about 260 and the non foundries one in less than

Superior Staff	European and Anglo-Indians	Indians
Managers	3,498	11,56
Supervising and technical Staff	9,147	77,53
Clerical Staff	2,066	20,66
Skilled Workmen	4,427	710,553

100 persons. The numbers of the superior staff have increased in industries of 20 and more employees by 61 per cent in the decade the increase being large in the more technical industries, such as textiles, collieries and metal workshops where progress has been specially noticeable.

240 The labour in the Industrial Schedule has been divided into the categories of skilled and unskilled. It was impossible to find a clear formula to distinguish the skilled and it was laid down generally that this group should only include workmen who were employed on work requiring special technical skill and training and were paid above the rates for unskilled labour. The particular problem had to be solved in individual cases in consultation with the managers of the establishments. The Census Superintendent of Burma, who has discussed the difficulty in his report in detail and has drawn up lists of those treated as skilled workmen writes —

“The distinction between skilled and unskilled labourers is exceedingly difficult to draw. Probably there never was a time when it was altogether simple. There were always some who were clearly skilled, and, if the skill that is easily and quickly obtained by almost everybody who practises them is taken for granted, there have always been some occupations which were clearly unskilled. But it must not be overlooked that there is a tacit convention here to take

* Including 5,000 persons details for whom by classes are not available

some skill for granted for instance, that of a handcart coolie in packing the cart with the best balance. Even so there were degrees of skill, and there must always have been some difficulty in determining whether some occupations were skilled or unskilled. The introduction of machinery has increased the number of these intermediate occupations. A large proportion of the machines which are used to do the work formerly done by highly skilled men are capable of performing only a limited number of operations and leave little scope for the adaptability and all round skill of the worker. This is true even in engineering work and the effect is generally still more marked in other kinds of work. Some machines are "fool proof" and hardly call for any skill at all others call for skill but commonly of a narrow and special type which does not really require the long apprenticeship of pre-machine days, and men who serve these are better described as semi-skilled. Even then there are occupations which cannot very easily be described as skilled, semi-skilled or unskilled, but seem to fall into two of these classes. And when the managers of industrial establishments found themselves confronted with a census schedule which recognized only black and white and saw nothing grey they naturally found still greater difficulty in classifying the semi-skilled. Accordingly there are probably some inconsistencies in the classification made in the tables. But not all apparent inconsistencies are real. Men whose occupation has the same name in two establishments may do different work. A motor-driver for instance is reasonably described as unskilled but when an establishment employs as driver a fitter who has specialised in motor-car work and does all or most of the necessary repairs to the cars he drives he has been described as skilled. A so-called clock-winder may be a skilled man who keeps a large number of clocks in repair. Generally the description of skilled or unskilled has been adopted for each occupation in accordance with the description given by the majority of the schedules for each kind of establishment but where any considerable numbers were involved, or where there was reason to suppose the occupation-record had other than its usual meaning, a reference was made to the manager to settle the point. Apprentices to skilled trades have been treated as skilled foremen, overseers or mistries have been treated on their merits they are sometimes properly regarded as skilled although the gangs they control are entirely unskilled.

In the whole number of establishments the skilled workmen form about one-fourth, and the unskilled about three-fourths of the total labour. The proportions of the skilled differ considerably in the different industries being as low as 8 per cent in the tea, coffee and rubber etc. plantations much higher (43 per cent.) in the textiles and over half in the metal and machinery workshops. The proportion of women is about 1 to every 12 men among the skilled and the number of children is negligible a few being returned from the cotton mills and collieries. Among the ordinary labourers, however there is one adult woman to every two men and one child to every seven adults. In the larger industries which are comparable to those of the 1911 schedule the increase in the skilled workmen has been 26 per cent. and in the unskilled 21 per cent. a natural difference due as in the case of the supervising staff to the progress made in such industries as mines, textiles and metal working. The drop in the proportions of adult women from 581 to 515 per 1 000 men and of children from 191 to 141 per 1 000 adults is largely due to the introduction of restrictions on female and infant employment. Women have declined in proportion conspicuously in the mining metal and dress industries, but have increased in the plantations. I am not inclined to put very much faith in the figures of children. Children are very easily overlooked either through carelessness or design and their position in the mines and workshops is always apt to be somewhat ambiguous. We have already traced the origin of a good deal of the industrial labour in Chapter III (Birthplace). It has not been possible to prepare tables showing in any detail the caste and birthplace of the skilled and unskilled workmen for all India and the subject is best studied in the individual reports of the Provinces. Some further information will be found on the subject in paragraph 44 where labour is dealt with generally.

241 Of the total number of industrial establishments 51 per cent. use power of some kind, the power being steam in 34 per cent.

Number of Establishments using power

Kind of power	N. of establishments
Steam	4,393
Water	1,323
Gas	42
Electricity—	143
1) generated on premises	289
2) supplied from outside	77
TOTAL	5,815

of the total number and therefore in considerably more than half of the concerns which use power. The detailed figures of engines and horse-power must be used with some caution as it is a matter of considerable difficulty to obtain accurate figures of this sort under the conditions in which the census was taken. The figures of power will be chiefly of use for special studies of the subject and it is not proposed to deal with this subject here in detail. Oil is used chiefly in the textile industries of Western India and in the

plantations and rice and flour mills of South India, water power is mostly used in Bengal the Punjab and Madras and gas engines are chiefly found in Madras and Bombay, supplying power to the textile spinning plants and to the smaller metal and miscellaneous workshops, and coffee and flour mills. A growing number of these smaller concerns are using power plants especially in South India. The number of rice mills using power increased in the district of Tanjore from 21 in 1911 to 244 in 1921 and from 1 to 61 and *nil* to 13 in Trichinopoly and Madura, respectively. Writing of the use of power in Bengal Mr. Thompson points out —

‘The jute mills dwarf every other industry as users of power, with engines developing nearly nine times the energy of those used in the collieries, which in turn is twice as much as in the cotton mills or railway workshops. Electricity is by far the most convenient form in which power can be transmitted to different parts of a factory, and about a quarter of the machinery of the jute mills is driven in this manner. Electricity generated on the premises is the favourite method of driving machinery in railway workshops, machinery and engineering works, and iron foundries, and has been adopted in the most up to date of the paper mills while arms factories, shipwrights’ workshops and to a less extent jute presses use electricity supplied from outside.’

242 The subject of female and child labour in industrial concerns scheduled in the special industrial census has been dealt with in discussing the figures of individual industries and establishments. In the total number of establishments reported just over a quarter of the workers (including children) are females, all but 8 per cent of them being unskilled labourers. The adult women (unskilled) number 508 per 1,000 adult men and the proportion of the children of both sexes under 14 years old is 140 per 1,000 adults. By far the majority of women labourers, viz. 322 out of 540 thousand are on the plantations, where their proportion per 100 men, is as high as 94 the children being 190 per 1,000 adults. Women and children are also numerous in the textile and mining industries and in the former there are 108 adult women (unskilled) per 1,000 men and in the latter 521. Nearly 30 per cent of the women employed in textile industries are recorded as skilled. About 61 per cent of the total number of children employed in organized industries are boys and the girls almost equal the boys on the plantations and in the mines and form about one fifth of the child labour in the textile industries. In the larger industries (20 persons and above) both female and child labour has dropped since 1911, the proportion of women (unskilled) being 515 now against 561 in 1911 per 1,000 men and the proportion of children per 1,000 adults 141 against 191 in 1911. The figures vary curiously in different industries and suggest that they are not altogether trustworthy. Women have increased in the plantations and textiles and declined in the mines. Children have decreased in the plantations and textiles and increased in the mines. Both women and children find considerable employment in the establishments connected with glass, pottery, cement and building and to a less extent in those of food and dress. The condition of female and child labour in industrial establishments has recently formed the subject of special report after expert enquiry by officials of the Industries Department and I do not propose to touch on the matter, though a certain amount of general information will be found in the Provincial Reports. A special enquiry made in the United Provinces, with a view to gauge the effects on the birth-rate of the employment of women in industrial concerns, is reported in paragraph 20 of Chapter XII of the United Provinces Report. The statistics, such as they are, show that the average ratio of children living to women in industrial concerns and plantations (1.8) is below that in the case of women living under rural conditions (2.3). But the reported cases are not numerous enough to allow of the figures being at all conclusive, and much wider enquiries of the sort would have to be made before any definite inference as to the relative fertility of the agricultural and industrial classes could be admissible.

Statistics of the numbers of employés and other particulars relating to “large industrial establishments of India” are given in a volume issued by the Statistical Department of the Government of India. These statistics, which distinguish government-owned and company-owned establishments and establishments employing power and establishments not employing power, are based (1) for all establishments under the Factory Act on the prescribed periodical returns and (2) for other concerns on such information as it was possible to collect from the local

Women and child
working in organ-
Industries

authorities or from managers, etc. of factories. The information relates to the year 1919 and purports to give the average number of employes during that year. It is admittedly imperfect in regard to establishments not under the Factory Act and no definite criterion has been taken as to what constitutes an establishment for the purpose of the return. Under these circumstances it is not possible to use the figures for purposes of comparison with those of the Industrial Census. The total number of establishments included in the list is 5,312 with 1,307,136 employes compared with 13,340 establishments and 1,800,287 employes (excluding plantations) returned in the Industrial Schedules.

Section IV—Census of Handloomes.

213 It was not considered

possible to take a census of handloomes throughout India but in several provinces and states local instructions were issued to the census staff to ascertain and record the number of handloomes in use in the towns and villages so as to gauge the extent of the cottage industry of weaving. The figures are given in the margin. There are no similar figures of the past, with which to compare them and it is not therefore possible yet to draw from them any conclusion as to the progress of the cottage industry. Some of the reports contain information regarding the conditions of work and of wages and prices which may be of interest to

Census of Handloomes.

Province & Agency	No. of handloomes in existence
Ajmer Merwara	1,287
Assam	421,357
Bengal	315,586
Bihar and Orissa	164,302
Burma	479,437
Delhi	1,007
Madra	169,803
Punjab	270,507
Rajputana State	10,831
Hyderabad & Co.	118,434
Rajputana (Agency)	88,741

the Industrial Department but which cannot usefully be collated here. Nor is it possible as has already been explained, to assess the number of handloom weavers in the country or in the various provinces. A large part of the weaving is done not for profit but for home use by the families of persons who have other whole time occupations. In Assam weaving is an established custom of the housewife and cloth is always made for home use. From a calculation based on the imports of yarn and cloth Mr. Tallents infers that the hand weaving industry of Bihar and Orissa is holding its own. Comparing the economic advantages of hand spinning and hand weaving he shows, by figures of cost and return, that there can be no profitable future for hand-spinning—

It does therefore that even on the assumption that the cost of spinning the thread is as if it will not pay the weaver to use hand-spun yarn. It is difficult to see how the cloth can be made an economic proposition in this province or how the hand weavers can avoid getting their supplies of yarn from the mills. The fact is, as pointed out by Marshall that textile materials produced by nature are standardized primary forms well suited for mass handling and standardized finished products. Cotton and wool both lend themselves to be laid out in orderly array by machinery and thus to be spun into yarn. The yarn supplied by the mills is stronger, more uniform and easier to weave than the hand-spun variety; the mill moreover can blend the raw cotton so as to produce the best results in any way in which the end product cannot. Every advantage therefore lies with the mill-spun yarn. The difficulty of the resulting situation from the hand weaver's point of view is two fold. When he purchases his hanks of mill-spun yarn he has to pay also for the cost of reeling, bundling and freight for the mill-owner's profit the salesman's commission, the freight and the middleman's profit to say nothing of the fact that he has himself to fetch it from the market and reward it for his own before use—All of which charges the rival mill-owner escapes but, worst of all, the mill which supplies the yarn is also a rival weaver of cloth and well aware of the fact. It is indeed surprising that the handloom weaver exists as he does in the tender mercies of the mills which can produce 80 per cent of the different kinds of articles which he produces just well if not better manages to maintain his place in the sun. The secret of his success appears to lie in the fact that he has the disposal of the labour of his women and children who otherwise would not be engaged in production of any kind consequently he is able to get all his preliminary processes done free of charge. His relation with the mills must always be one of weakness to him, but he has managed to struggle against it so far and there seems to be no room why his position should not be strengthened as his other handicaps are minimized by the introduction of improved appliances and methods of marketing. The case of hand weaving differs entirely therefrom in the private yes when all the members of his family are busy in the field but there are also periods when this is not the case and when the family is idle. At such times there is much labour running to waste and ample scope for some form of secondary occupation. The cultivator who could bring himself and his family to learn the art

and face the initial outlay of a loom and its connected appliances (say Rs. 25) would save himself the difference in cost between the cloth which he buys and the yarn of which it is woven at present prices (say Re. 1-2) over each *chaddar* and each *sari* used in his family. The initial outlay on the loom could be recouped in a couple of years and thereafter the money saved would be sheer profit. Hand weaving conducted on these lines would be as sound economically as it would be acceptable to the sentiments of the people.

In the United Provinces there is a drop in the number of those recorded as having textile occupations and in analysing the figures Mr. Edye traces the loss to the indigenous industry rather than the organized industry, though he thinks the figures too imperfect to indicate the extent of the movement either way. Of cottage industry as ancillary to agriculture he writes—

"Industry of the third type is clearly what is best suited to the conditions and genius of the country, especially of those parts of the country where agriculture is precarious. The bulk of the population is agricultural and agriculture here means ordinarily the growing, harvesting and disposal of two crops in the year and not the mixed farming familiar in England. Agriculture of this kind involves very hard work for certain short periods—generally two sowings, two harvests, an occasional weeding in the rains and three waterings in the cold weather—and almost complete inactivity for the rest of the year. In precarious tracts inactivity may be unavoidable for a whole season or even for a whole year. These periods of inactivity are, in the great majority of cases, spent in idleness. Where the cultivator pursues some craft which will employ himself and his family at times when they are not required in the fields—a craft in which continuity of employment is not essential—the proceeds of that craft are a saving from waste, and therefore clear gain. The most typical of such crafts, which political controversy has made familiar, and the one which is most widely pursued is the production of home-spun cloth. Others have already been alluded to. Weaving is a cottage industry for all the impetus supplied by a political movement appears to be on the decline—it has failed to advance partly perhaps because the '*Gandhi chari*' on whose use the movement insists produces a yarn which—so I am credibly informed—owing to its unevenness is almost unusable. But however adapted cottage industries may be to local conditions, the cottage craftsman has no capital and no business capacity. These things must be supplied from outside and where the industry is flourishing they are so supplied.

Hand-weaving is a process which can be taken up and left off at any time, and at which all members of the family can assist. It requires little capital and its product can be used by the producer or can find a ready market. For the last few years the people have been advised with an eloquence whose very volume might be expected to persuade, to adopt this craft *en masse*. Yet the marginal figures show that no result has so far been achieved. This is unfortunate and surprising, perhaps the reason is that public men have forgotten to combine sound technical advice with their political propaganda. There is here

Year	Number per 10 000 who are also weavers	
	Cultivators	Field labourers
1911	24	5
1921	18	11

another illustration of the fact that politics benefit no one but the politician.

In Bengal cotton spinning and weaving supports 521 000 persons and the number has risen in the decade. Of the handlooms in use in the factories of Bengal more than one-third are fitted with the fly-shuttle, which is not nearly so common in Assam or Bihar and Orissa and is comparatively rare in the United Provinces. The position of the handloom weaver in Madras is discussed in the report, but it is hopeless to collate the figures at different censuses of persons supported as they are evidently untrustworthy, though the drop at the present census has probably some basis in fact. The writer of the Industrial section in the Madras Report remarks—

"The attempt to organize the handloom industry in small factories has definitely proved a failure chiefly owing to the indolence and indiscipline of the workers, though such factories would greatly reduce the time taken in preliminary processes. With the laborious methods of warping and sizing now employed the average outturn of the handloom weaver does not much exceed 100 lb. of cloth per head per annum. The popularization of the fly-shuttle has, however, done something to increase the output and attempts are being made by the weaving branch of the Department of Industries to introduce simple machinery to be worked by groups of weavers without bringing them into factories which should further increase their capacity to earn. But as was observed in 1911 the future of the handloom industry depends almost entirely upon the improvement of the hand weaver himself.

The fly-shuttle is largely used in the Tamil districts. In the Hyderabad State the number of looms with the fly-shuttle far exceeds those without, the figures being 84,392 with and 31,042 without, the Telingana workers generally using the fly shuttle. In the Bombay Presidency no census of looms was taken. Mr. Sedgwick

has attempted to separate the figures of textile home workers, but he points out that any comparison with those of previous years is vitiated by the large number of the class who are returned in the general category of labourers and workmen otherwise unspecified, and there is unfortunately the same drawback in the figures of most other provinces. We must then, on the whole, conclude that any estimate of the tendency of the home-weaving industry based on the census figures is at present inconclusive. But the record of the handloom census, if it is continued may afford material for a better estimate at a future census. The statement below gives comparative figures of the numbers in 1911 and 1921 of the chief weaving castes in some of the Provinces, who returned their occupations as weavers. As will be seen the figures vary considerably and for reasons already given I place little reliance upon them.

Province.	Caste.	Year	Number returned as	
			actual workers.	weavers.
Bengal	Jugi (H)	1911	119,234	43,028
		1921	127,877	45,321
	Jelaha (M)	1911	304,719	64,823
Bihar and Orissa		1921	286,129	71,070
	Tanti & Taiwa (H)	1911	271,326	60,870
		1921	212,292	64,686
Bombay	Knakti, Halgar, Jod, Viskar Sah	1911	28,276	23,770
		1921	44,317*	29,094*
	Palaki	1911	22,480	2,008
		1921	26,267	2,407
	Ganda	1911	62,161	10,923
		1921	85,347	18,847
Central Provinces	Kori	1911	18,748	7,418
		1921	16,497	8,266
	Knakti	1911	84,623	66,787
		1921	78,730	87,803
	Mahar or Makra	1911	122,487	23,773
		1921	177,073	76,918
	Paska	1911	82,627	10,486
		1921	77,488	17,374
	Davanga (H)	1911	28,116	22,081
		1921	112,111	61,314†
	Kankalan (H)	1911	80,701	27,300
		1921	164,204	73,806†
Madras	Sala (H)	1911	63,008	40,113
		1921	124,428	86,650†
	Jelaha	1911	288,664	182,083
Punjab		1921	227,828	177,128
	Jelaha	1911	455,588	250,029
		1921	491,673	233,641

Males only (Textile Industries.)

Section V.—Labour

Statistics of labour.

244 The word "labour

Class and Group.	Number (1921 estimated).
Female servants (C)	887
Field labourers (D)	21,298
Dock labourers (798 and 1809)	130
Road (1117)	686
Railway (719)	174
Labourers unspecified (187)	2,390

employment. The principal scheme are shown in the marginal table. Besides these persons who actually ascribed themselves as labourers there are a number of categories which contain a

Truckmen	1,022
Food carriers	262
Persons occupied with hides and skins	423
Barber, Mahars	1,864
Porters and barrowmen	1,277
Outside workers	1,841
TOTAL	12,847

covers a multitude of persons performing different kinds of simple occupations, the actual type of employment varying according to the season of the year and the nature of the demand. It is not possible as we shall see to isolate as a distinct class the labourers of India and treat them as a separate subject of statistical enquiry but we have already discussed the occupations, castes and origins of a large section of the labouring classes in connection with agricultural and industrial categories of labourers included in the classified

considerable proportion of what may be called labour of which part is definitely associated with the particular industry but much is only temporarily attached and belongs to the fluid mass of general labour available for every kind of unskilled employment. The chief categories

of this kind total up to about 12 millions of persons supported, of whom perhaps nearly one-half or 6 millions, may be placed in the class of "labour." To these

must again be added a large and indefinite number of petty cultivators, who form a seasonal reserve of labour available both for agriculture and for industries. Dealing with the classes who returned themselves as either field labourers

Province	Field labourer group 1	Labourers etc., in specified group 18	Total
N. and N. W. India	4,509,500	1,012,851	5,522,351
Eastern Provinces	10,000,750	1,782,839	11,783,589
Western India	7,250,718	1,107,800	8,358,518
Central India	4,225,140	1,012,010	5,237,150
South India	7,400,707	7,716,706	15,117,413
Burma	2,085,600	378,230	2,463,830
TOTAL	31,627,314	10,292,647	41,919,961

or labourers unspecified and form the bulk of labour proper we find them distributed over the country as in the margin. We have already seen in Chapter III (Birthplace) that the large labour reserves are found chiefly among the lower classes of the centre and south of the country. The centre supplies the tea plantations and mining industries of the

eastern provinces, the south meets the southern industrial demand and the bulk of the Burma and overseas demand, while the more technical industries in the cities of the Western Provinces are supplied chiefly from the neighbouring agricultural tracts. Some valuable information has been given in the provincial reports regarding the local conditions of housing, wages, recruitment and so forth, which will be of interest to those who are making a special study of the subject. It is only possible in this report to quote some of the passages which deal with the more general aspects of the distribution and character of Indian labour.

215 Of the character of general labour in Bihar and Orissa Mr Tallents writes —

“There is a considerable local demand for the miscellaneous labour represented by this group which requires no special skill or experience beyond what a coolie may be expected to acquire in the ordinary course of his career in connexion for instance with the construction or repair of roads and buildings for Government or the local bodies or with railway works or the thousand and one minor activities of the local contractor. Labourers of this kind emigrate in thousands to Bengal but a considerable demand for them exists in the province. It is persons of this type who are included in group 187 and in order to obtain a more distinct idea of their circumstances a set of questions was drawn up and circulated throughout the province to which over 80 replies were received from contractors, both small and great. The demand and supply of labour for work of this kind is regulated by the seasons. On the one hand the contractors require labour from July to October or November for consolidating *pucra* roads and from November to February for repairing *lutcha* roads and other forms of earth work while bridges are repaired and buildings erected most conveniently in the cold and the hot weather. On the other hand the labourers are not easily obtainable in the cultivating and harvesting seasons—complaints on this head are universal—when the demand for and price of agricultural labour rises. This fact shows that the distinction between unskilled and agricultural labourers is not a hard and fast one, so that if the census was taken in say July a considerable transfer would probably take place from group 187 to group 5. In Bihar the castes in most demand for earth-work are Nuniyas and Beldars or in some places Binds, though all the usual castes such as Goals, Koiris, Chamars, Dosadhs, and even Brahmans and Rajputs are mentioned. For masonry work Muhammadans are preferred and amongst Hindus Gonrs and Telis. In Orissa, the castes usually employed are the Bauris, Chasas, Pans and Khandaits while a certain number of Santals from the states find employment in Balasore. In Chota Nagpur the castes are more various. The local aboriginal tribes do most of the earth-work. In Hazaribagh the Bhuiyas are preferred for earth-work and the Kandus who are akin to the Gonrs for masonry. In Ranchi the Oraons and Mundas do much of the unskilled work while that which requires rather greater skill is done by Muhammadans, Dosadhs and Lohars. In Palamau, Nuniyas and Oraons are preferred for earth-work. In Manbhum, where the draw of the coal-field and the factories is felt, Santals, Bauris, Koras and Kurmis are most commonly employed. The Hos in Singhbhum are generally employed on daily labour and the Oraons on contract work—a preference which they show also at Jamshedpur. The Santals in the Santal Parganas are commonly employed on earth-work while Muhammadans and Nuniyas are engaged for breaking ballast. In Sambalpur it is the Gandas and Sahars who do the earth-work and the Kols, *re*, the Oraons, Mundas and Kharias who are employed on the buildings. Generally speaking however the local aboriginal tribes do the earth-work, while the lower Hindu castes and the Muhammadans do the work in which a rather higher degree of skill is required. The labour is mostly local. In South Bihar some of it comes from North Bihar and in both North and South Bihar some of it comes from the adjacent districts of the United Provinces. In Orissa the labour is local; labourers drift from Cuttack to Puri and from Puri to Cuttack, but as a whole Orissa supplies its own demand for labour of this kind. In the Chota Nagpur Plateau also the labour employed is of local origin except that the Shahabad labourer finds his way into Palamau and the Cuttack labourer into Angul. Labourers can usually be obtained without the assistance of a recruiting agency but if any difficulty is experienced an emissary in the shape of a *mate* or *gomastha* is sent

out armed with advances to look for men. Advances also are commonly given even when the labour comes of its own accord and vary from the equivalent of a week's to a month's wages the larger contractors sometimes employ sub-contractors and in that case the advances are made to them. Where a contractor is in the habit of taking contracts every year in the same neighbourhood, the same labourers will often come and work for him from year to year but there is nothing to bind employed to employer except local convenience."

Of conditions in the Central Provinces Mr Roughton writes —

There are three main labour recruiting grounds for this province. In the north Rewah State supplies Kols, the traditional earth workers, and other castes in the south-east Gond and Chamars are recruited from the districts and states of Chhattisgarh and in the south a number of Telugu castes leave the Nizam dominions for employment on the Chanda coal mines. In addition a certain amount of labour is brought from various parts of the United Provinces. These areas are the places from which labour is recruited for specific purposes. The cotton industry does not as a rule send outside for recruits, but the mills obtain their supplies from applicants at their gates who may or may not be natives of the district.

Two systems of recruitment are employed. Agents may be sent to the recruiting areas who are servants of recruiting establishments they pay the labourer the expense of his journey and also advance him a sum of money as an inducement to leave his home or labour may be bought from a private contractor at so much per head. In one of the Chanda coal mines a gang of Kols was working under a Pathan head man. This gang was recently working on the Mahanad Canal head works in the Raipur district, had then been employed on railway earth-work in Chanda, and finally had reached the coal mine. As each transfer occurred, the head-man received a sum which was supposed to represent the loans outstanding against the labourers on their previous work. In this case it is doubtful if the labourers themselves ever received any of the advances in cash. Where advances are directly paid to the labourers the amount varies considerably. In the Chanda coalfields as much as Rs. 80 per labourer is paid for immigrants from the United Provinces, and Rs. 10-15 for labourers from Hyderabad State. Rs. 60 per head may be paid for Chhattisgarh labourers in the manganese mines. The advance system is a vicious one, which is to the advantage neither of the labourers nor of the employers. The advance is seldom if ever repaid, and though the more reputable employers have agreements by which they decline to employ labourers recruited by other concerns, there is always a number of smaller and less scrupulous employers who avoid the expense of importation of labour by bribing the labourers of a neighbouring concern to desert to them. From the point of view of the labourer also the system is unsatisfactory as it fastens about his neck a load of debt to the avoidance of which he devotes much ingenuity. At present, however, it is the only method by which labour can be recruited from a distance, and even if wages were raised so as to attract labour without advances it is the expense of most employers that the labourer when he has received sufficient for his maintenance, ceases to work, so that a rise of wages is generally accompanied by a corresponding decrease in the work done. Apart from the large advances in recruitment, the labourer generally seeks to get advances during the course of his employment. In many of the cotton mills monthly wages are paid 3 or 4 weeks after the end of the month in which they were earned. If the labourer waited for an advance soon, he obtained it against the security of his earned wages, and interest generally at the rate of 37½ per cent was charged to him. The charging of interest however has now been discontinued, probably as a result of the organisation of labour in the Bombay mills.

At the time that the census was taken the supply of labour had been very seriously diminished by the mortality of the influenza epidemic, and it might have been expected that a position would have arisen in which the supply of labour was totally inadequate. Such, however, was not the case. Had it been so the law of supply and demand would inevitably have caused wages to rise more than prices, while the comparison made in Chapter I shows that this is not so. Owing to the system common in industrial centres of paying labour partly by means of grain supplied below the market price, it is difficult to estimate the real increase in industrial wages. Cash wages however have seldom risen by more than 50 per cent. That the total supply of labour is not inadequate is shown by the fact that agriculture, on which the majority of the population depends for its living does not employ labour fully all the year round. There are large portions of the province in which the kharif crop which is reaped at the end of the rains, is the only crop of importance that is grown, and when this crop is gathered, there is a scarcity of employment until shortly before the break of the next monsoon. Had there been a real shortage of labour economic conditions would have compelled a more scientific distribution of work. It is of course true that there is a heavy seasonal demand such as occurs in Bihar at the time of cotton picking or in the north for the wheat harvest, but this is met by a corresponding movement of the population. The flow of industrial labour naturally depends on agricultural demands. If there is a good cotton crop the gins in the Malwa Plain country compete for labour from December until well into the hot weather. Certain industries also suffer from lack of labour owing to caste prejudice against work of particular kind e.g. the coal mines often are short of work as the number of castes which will work beneath the surface of the earth is limited. Similarly manganese mines do not depend largely on local labour which

is only employed on lighter work. They, therefore, keep a permanent supply of labour. At the time of the census the larger mines were keeping up their output above the demand, which was slack, in order to retain their labour. In the Jubbulpore industrial centres labour was inadequate at the time of the census but has since been forthcoming in sufficiency. In the cotton country the situation of the mill or gin is an important factor in the labour supply. In Hinganghat and Burhimpur, through which places labour passes from Chanda and the south, and from Bombay, the supply is seldom inadequate, while in the centre of the Maratha Plain the stream of labour may be practically dried up before industrial demands are satisfied. But the general conclusion is that although the labour supply may be inadequate at certain seasons of the year and temporarily for even longer periods, the supply is, on the whole, quite sufficient and can be increased by an improvement in wages and general conditions."

Mr. Edye contrasts the conditions of labour in the United Provinces with those of England in the following passage—

"A large part of this labour force is permanently attached to the land, a very small part—considerably less than 100,000 actual workers—is permanently attached to certain organized industries. What remains is mostly persons ready to put their hands to any work that offers, but only in the last resort at a distance from their homes. There would probably be sufficient labour to meet the present needs of the province if enterprises requiring it were dispersed over the country and were able to time their demands so as to avoid the busy agricultural seasons. Unfortunately neither of these conditions is fulfilled. As to the first, the tendency is all towards concentration principally at Cawnpore, Agra and other big cities. As to the second, the busy months are March, April, July, September, October and November; the smaller textile concerns, flour mills, sugar factories, and road and railway construction are to some extent able to avoid these months. But generally speaking everyone is crying for labour at the same time and especially in the cold weather. The scarcity of labour is well illustrated by comparison with the statistics of England and Wales. In the latter country, labourers (actual workers) number 71 per cent. of all workers. In this province, if it be assumed that of the five and a half million persons believed to be supported by 'Labour' three million—a generous allowance—are actual workers, labourers (actual workers) number 12 per cent. of all workers. The figures for agricultural labour are still more remarkable. In England and Wales to every 1,000 farmers there are 3,620 agricultural labourers. In the United Provinces to every 1,000 cultivators there are only 133 agricultural labourers. These are the proportions for actual workers in each case. Two obvious but important conclusions can be drawn from these figures. On the one hand labour in this province is not entitled to and is never likely to attain, any considerable political power. On the other hand it has, and can exercise if and when it elects to do so, enormous industrial power. Being seriously short of requirements, it is in a position to dictate to the employer, being numerically weak it is not in a position to dictate to the State. It can therefore bring pressure to bear on the State only through the employer. In England on the contrary labour being adequate to requirements and therefore numerically strong is more powerful *vis à vis* the State than *vis à vis* the employer and has learnt to bring pressure to bear on the employer through the State."

Mr. Boag writes of the adequacy of labour in Madras—

"A question of the first importance to Madras which is mainly dependent on agriculture is the sufficiency of the supply of agricultural labour. The census statistics by themselves do not throw much light on the subject, but by comparing the present proportion of labourers to landowners with that which obtained in 1911, we may get some notion how conditions are moving. In 1901 there were 270 working labourers for every 1,000 persons (workers and dependants) supported by the other agricultural occupations, in 1911 this proportion had fallen to 245, in 1921 it was only 212. There is no doubt that these figures reflect the great increase in emigration which we have seen occurring in the closing years of the decade. The figures will afford but cold comfort to those who see in emigration nothing beyond the fact that it denudes the district of its agricultural labour. Casual agricultural labour is generally paid in grain, at the rate of 5 to 8 annas a day for a man or 3 to 1 annas for a woman. The farm servant is paid in a variety of ways, his condition varies from practical slavery to comparative independence, but such is the custom of the country that the master nearly always contrives to get his servant into his debt, and thus obtains a powerful hold over him in case he thinks of leaving his service. Sometimes these servants are paid a fixed annual quantity of grain, sometimes all they can claim is a specified share of the yield of their master's land, in other localities these methods are combined. Of late years labourers generally have begun to bestir themselves to secure better conditions, and this spirit has spread in some places even to that most conservative of men, the agricultural labourer. The labour of the East Coast has for a generation or more been in the habit of emigrating to Burma, Ceylon or the Straits whenever times were bad, or the master was more than usually troublesome, and in Tanjore district at any rate the labourers know well how to use the threat of emigration to extort better conditions from the master. Of late too the Government have started an organization to make a special study of labour and so far as may be possible to improve the conditions under which it works. Labour has learnt to assert itself and nothing that the master can do will ever succeed in driving it back to the squalid stupor from which it has just been roused."

Section VI—The Occupations of Women.

The occupations of women.

248. The occupations of women are tabulated in Table V. The proportion of female to male workers in the whole population is shown as 455 per mille. The figures however are subject to the unsatisfactory features already described in dealing with the distinction of worker and dependent and the ratio gives an entirely inaccurate impression of any social or economic truth. As Mr Grantham (Burma) remarks—

A woman who gives only a small part of her time to a remunerated occupation counts in it as a worker just as much as a man who spends all his working hours at his occupation. Logically many female workers should be classified primarily in domestic duties, and having their remunerated occupation as a subsidiary occupation; then a much fairer description of their occupations would be obtained. It is not only a matter of comparison with the figures for males: it is a matter of principle. The time spent by a woman at occupations in the same way as men ordinarily do is not the same as that of a man with only the same weight as those who give only a little time. As an example of what is perhaps the most important instance namely the weaving industry in the hill country of the women have a loom always ready for a little weaving to be done when time can be spared from household duties little by little in odd moments a piece of cloth is woven and the ends of the family budget helped to meet. In other houses, especially when there are more daughters than are required to assist in cooking etc. some women will specialise in weaving and give up the greater part of their time to it. Statistics which do not distinguish these cases are obviously misleading and it is certain that if what is in fact a small number of women were counted the figures would be very different from those actually tabulated. In the great part of the delta the part taken by women even in agriculture is very small. The physical conditions are held to forbid it. Women plough only rarely. The rice is sown in a rice-plant paddy where the water is deep. They take part in the rearing of rice in the dry season to the extent of tilling and gathering sheaves. They do not as a rule undertake the thrashing. In other parts of the country conditions are different. In parts of Provinces where there are many pools and shallow water in the rice-fields, transplanting is not considered a very heavy task for a woman except in special circumstances, and it will not risk the banter a woman would incur by doing it. But even so it would be found that a large number of the women recorded as working with some kind of agriculture as their principal occupation really give only a very small part of their time to it and in England women who only did as much would not be regarded as having an occupation at all. So too for many occupations the tabulated female workers give only a very small proportion of their time to the occupations shown for them. Moreover the part actually taken by women is worth consideration. In a large number of the cases in which a woman is described by Burmese as assisting in her husband's work her share consists chiefly in cooking the food for him and his direct assistants. Many of the women were recorded as agricultural workers only because at the time of the preliminary enumeration of the census they were actually camping with their husbands and children beside the threshing floor so that the whole family considered itself as jointly engaged in the work and in fact even the youngest baby who can toddle does at those times do his share by helping to tend the cattle.

The figures given for female workers must be interpreted for each occupation according to the conditions under which it is carried on. The sum total for all occupations of the recorded figures includes women who give very different proportions of their time to those occupations, and in fact it includes many who give no more time to them than do other women who did not consider the occasional help they gave their husband constituted an occupation, so that it is really meaningless. An attempt was made to get this statistic by having a record made of women who gave the major part of their time to house-keeping. It would then have been possible to tabulate female workers who gave little time to house-keeping as genuine workers of whom the occupation recorded was their primary occupation, and also the occupations recorded for the others as subsidiary to house-keeping. This was a very difficult task in such cases as a man and wife running a shop together and taking turns to look after it until the wife has to cook dinner in the evening while her husband looks after the stock. But these might have been left as roughnesses in the statistics. The real difficulty was that the latter part of the record was not appreciated, and consequently enumeration was generally badly instructed and the record was too badly made to be worth completion so that the project had to be given up after examining the records of some sample areas in districts for which the Deputy Commissioners had reported that the record had been made with little success.

Similarly of the tribal woman Major Fowle (Baluchistan) writes—

"Of the tribal woman it was noted in the 1911 Report.—In theory she has no occupation at all; she is a mere dependent on the family unit, which she was born or not which she has married. In actual fact she is one of the hardest workers in the family, though most of her work is household drudgery and other lowly labour that the tribesman considers beneath his dignity. If for instance it is the man who ploughs the soil and sows the seed and water the crop, it is the

woman who assists in the reaping and threshing, and whose special duty is the grinding of the daily corn, and the making of the daily bread. Amongst the nomads the flocks and herds are the man's special care, while the woman pitches the tent, milks and churns. Whether nomad or villager, the woman is the universal hewer of wood and drawer of water. In fact, without her the tribesman's life would not be worth living, and apart from other considerations it is no wonder that there are so few indigenous bachelors in the Province. At the same time ask a tribesman to enumerate the workers in his household and he will only give the number of full grown men declining to dignify his women folk with the title of workers, though she probably often works a good deal harder than he does, and the difficulty remains as to how—from the census point of view—to classify this maid-of-all-work."

Dealing at present with occupation record in the population census we find certain categories in which women workers are more numerous than men. In the textile industries spinning of cotton, wool, silk and other fibres is largely done by women, and both in cotton and wool spinning there are more than three times as many women workers than men, while among the total number of textile workers the proportion of women workers per 1,000 men workers is as high as 642. Another large industry in which women workers exceed the men in numbers is the food industry where there are 1,259 females per 1,000 males. The number of women who pound rice or grind flour is more than five times the men and women are largely employed in the tobacco trade. The classes of midwives, nurses and so forth and that of procurers and prostitutes naturally contain mostly women and among indoor domestic servants women are numerous *viz* 519 per thousand men. In the classes of unskilled labour the proportion of women workers is high, *viz* 934 among field labourers, 1,268 among grass sellers, 571 among fuel collectors, etc., while among the miners the proportion in the coal fields is 564 women per 1,000 men. Among ordinary cultivators the proportion is 396 but it rises to 898 on the tea, coffee, etc., plantations.

In comparing the figures of the present census with that of last in respect of

Occupation	No. of women workers per 1 000 men	
	1921	1911
Ordinary cultivators	396	368
Field labourers etc	840	667
Plantations (8)	898	894
Coal Mines, etc	52	542
Textiles	642	657
Food Industries	1 259	1 647
Trade in foodstuffs	527	594
Dealers in grass etc	1 268	1 264
fuel	1 327	1 606
Midwives etc.	2 141	2 708
Indoor servants (181)	519	622
Labourers unspecified	780	740
Unproductive	591	599

the proportion of women workers we have to remember that the ratio of women in the population generally has dropped and that there is in particular a shortage of young adult females. The total number of women workers in the population in 1911 was 466 against 455 in 1921. The comparative proportions in some of the main industries employing women are given in the margin. Women workers have dropped in proportion in almost all the large female industries. In view of the change in the sex-ratio and the difficulty in any case of distinguishing between women

workers and dependants it would be dangerous to draw any economic conclusions from the figures. Similarly any comparison of the proportion of female workers would have to take into consideration the sex-ratio and age-distribution of the countries compared. Mr Thompson points out that, as compared with 141 female workers over 10 years old in Bengal per 1,000 male workers, the proportion in England and Wales was 325 in 1911. The comparison is subject to the defect pointed out above, but there is no doubt as to the loss of power to the community in India by the seclusion of women from productive employment other than child-bearing. Writing of economic conditions in the Punjab Mr Calvert in his book "Wealth and Welfare of the Punjab" remarks—

"There is a vast waste of female labour, due primarily to custom and prejudice. In most other countries the proportion of female labour to the whole is high, while its efficiency is equal to the tasks performed, the contribution to the national dividend resulting from this forms an appreciable part of the whole. If there were in Western countries a movement aiming at the exclusion of female labour from all except purely domestic tasks, that movement would endanger the whole economic fabric, and, if successful, would involve those countries in ruin. The Punjab discards what in England and elsewhere is an absolutely necessary element in the maintenance of their civilisation. The fact that there are tribes, such as Brahmans and Rajputs, which do not allow their womenfolk even to work in the fields is alone sufficient to explain their poverty. The work of women as clerks, shopkeepers, post and telegraph operators, factory hands, etc., and in connection with the fish industry, market garden, pit-tops, etc., has no counterpart here. In the course of generations the loss from this waste alone must have made material progress almost impossible. No European country could maintain its present standard of living without the assistance derived from female labour."

Section VII—Occupation by Race and Community

Occupation by Race
and Community

247 In dealing with the various occupations and groups of occupations and especially in describing the industrial distribution of the people we have indicated in many cases the class of people who are chiefly engaged in the various occupations. A comprehensive survey of the functional distribution of the population by religion or by social community for the whole of India is of little value even if it were possible to give it. Imperial Tables XX and XXI were designed to show respectively occupations by "Religion" and by "Race or Caste" but they are both optional tables and have not been prepared by all Provinces except in the case of the occupations of Europeans and Anglo-Indians (Table XXI). In a social organization which is so largely based on functional groups it would be of interest to ascertain from the statistics how far traditional occupations are being abandoned. The figures, however, are for various reasons of very doubtful value. Where the traditional occupation, as in some of the lower groups, carries a stigma there is a reluctance to return it so much so that in Madras it was decided to abandon any reference to the traditional occupation and the column was omitted. The terms cultivation, agricultural labour and labour unspecified are of such general inclusiveness that they form unfathomable reservoirs of doubtful cases and their variations dominate and obscure those of the less numerous categories. Even where the table of occupation by religion and caste have been prepared they have frequently been presented without comment on, or analysis of, the figures and I am not prepared to discuss figures of this sort, which depend so much on local conditions, without the assistance of local analysis. For these reasons I have not had tables of occupation by community prepared for India as a whole and Imperial Table XXI shows the occupations in general categories of Europeans and Anglo-Indians only. Of the 103 405 male Europeans, 63 538 belong in some capacity to the category of Public Force i.e. the Army, Navy, Air Force and Police, over 9 000 to Transport, i.e. largely railway officials and about 6 000 to Public Administration, 4 600 to Mines and Industries, 5 000 to professions, 4 600 to trade while there are about 4,200 imperfect entries, a number which together with the known deficiency in the census of Europeans generally somewhat detracts from the value of the details. The abnormal constitution of the foreign European population is exhibited by the small number of dependants, viz. 62,000 as against 111 000 workers, whereas the number of Anglo-Indian dependants is just about double the number of their workers. Nearly one-third of the Anglo-Indian males are employed on Transport, i.e. chiefly Railways and the remainder mostly find employment as clerks and upper subordinates.

SUBSIDIARY TABLE I.

General distribution by occupation.

CLASS, SUB-CLASS AND ORDER	NUMBER PER 10 000 OF TOTAL POPULATION		PERCENTAGE IN EACH CLASS SUB-CLASS AND ORDER OF	
	Persons supported	Actual Workers.	Actual Workers.	Dependants
2	1	4	5	6
TOTAL	10,000	4,633	46	54
A—PRODUCTION OF RAW MATERIALS	7,315	3,355	46	54
I—Exploitation of animals and vegetation	7,298	3,344	46	54
Pasture and Agriculture	7,247	3,320	46	54
(a) Ordinary cultivation	7,013	3,174	45	55
(b) Growers of special products and market gardening	46	78	59	41
(c) Forestry	10	3	51	49
(d) Raising of farm stock	140	92	65	35
(e) Raising of small animals	1	1	45	55
Fishing and hunting	51	24	46	54
II—Exploitation of minerals	17	11	64	36
Mines	13	8	66	34
Quarries of hard rocks	2	2	61	39
Salt etc.	2	1	53	47
B—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	1,759	815	46	54
III—Industry	1,049	498	47	53
Textiles	248	129	51	49
Hides skins and hard materials from the animal kingdom	23	10	42	58
Wood	114	50	44	56
Metals	57	23	40	60
Ceramics	70	34	49	51
Chemical products properly so called and analogous	38	18	48	52
Food industries	98	52	53	47
Industries of dress and the toilet	235	108	46	54
Furniture industries	1	1	45	55
Building industries	55	26	46	54
Construction of means of transport	2	1	43	57
Production and transmission of physical forces (heat light electricity, motive power etc.)	1	1	46	54
Other miscellaneous and undefined industries	107	48	44	56
IV—Transport	137	62	45	55
Transport by air	24	11	53	47
Transport by water	68	32	47	53
Transport by road	39	17	43	57
Transport by rail	6	2	37	63
Post office Telegraph and Telephone services				
V—Trade	573	255	44	56
Banks, establishments of credit exchange and insurance	32	11	35	65
Brokers, commission and export	8	3	37	63
Trade in textiles	41	15	38	62
Trade in skins, leather and furs	7	3	38	62
Trade in wood	7	3	40	60
Trade in metals	2	1	39	61
Trade in pottery bricks and tiles	2	1	54	46
Trade in chemical products	4	2	42	58
Hotels, cafés, restaurants, etc.	22	12	49	51
Other trade in food-stuffs	234	135	46	54
Trade in clothing and toilet articles	9	4	41	59
Trade in furniture	5	2	42	58
Trade in building materials	2	1	50	50
Trade in means of transport	11	4	41	59
Trade in fuel	16	10	59	41
Trade in articles of luxury and those pertaining to letters and the arts and sciences	15	6	43	57
Trade of other sorts	90	42	44	56
C—PUBLIC ADMINISTRATION AND LIBERAL ARTS	312	131	42	58
VI—Public Force	69	33	48	52
Army	24	14	58	42
Navy			44	56
Air force			83	17
Police	45	19	42	58
VII—(Order 45) Public Administration	84	32	38	62
VIII—Professions and liberal arts	159	66	41	59
Religion	78	33	42	58
Law	11	8	29	71
Medicine	21	8	30	70
Instruction	23	11	42	58
Letters and arts and sciences	24	11	44	56
D—MISCELLANEOUS	614	332	54	46
IX—(Order 51) Persons living principally on their income	15	6	38	62
X—(Order 52) Domestic service	144	80	55	45
XI—Insufficiently described occupations (Order 53.—General term which do not indicate a definite occupation)	351	188	54	46
XII—Unproductive	124	58	57	43
Inmates of jails, asylums and almshouses	5	4	83	17
Beggars, vagrants and prostitutes	90	53	56	44
Other unclassified non productive industries	1	1	45	55

Commercial and professional population by locality.

LOCALITY		INDIA - 1951				OTHERS				TOTAL	
Serial	District	Total	Male		Female		Male		Female		
			Actual	Percentage	Actual	Percentage	Actual	Percentage	Actual		Percentage
12	12	12	1	16	1	1	10	20	21		
44	12	13,00,171	10	41	55	1,77,372	57	84	47	INDIA	
45	12	7,113	11	6	44	1,000	1	61		Andhra Pradesh	
46	12	1	12	60	11	11	1	21	1	Assam	
1	1	60,000	1	1	1	1,000	1	11	1	Bihar	
47	1	1,111	1	10	1	1,111	112	1	1	Bombay	
4	1	1,111	1	1	1	1,111	11	1	1	Bengal	
5	47	271,000	1	1	1	1,000	1	1	1	Bihar	
61	1	111,000	1	1	1	1,000	111	1	1	Bombay	
6	1	1,111,000	1	1	1	1,000	1	11	1	Bombay	
6	61	11,000	1	1	1	1,000	1	1	1	Bombay	
67	24	1,111	1	1	1	1	1	1	1	Bombay	
6	24	1,111,000	11	1	1	1,000	1	1	1	Bombay	
23	61	1,111,000	1	1	1	1,000	117	1	12	West Bengal	
2	6	1,111,000	21	1	1	1,000	1	1	1	Bombay	
67	23	6,00,000	11	42	1	1,000	1	1	11	Bombay	
27	64	1,111,000	73	1	1	1,000	1	1	1	Bombay	
48	2	1,111,000	1	11	1	1,000	1	1	10	Central India (General)	
28	62	1,111,000	1	27	67	1,000	1	1	1	Chhatisgarh	
45	22	1,111,000	11	17	1	1,000	1	1	17	Goa State	
29	29	2,01,111	16	44	1	2,00,000	271	1	10	Haryana State	
33	62	1,111,000	1	41	10	1,111,000	67	17	1	Karnataka State	
34	66	1,111,000	16	73	67	1,111,000	1	10	61	Madhya Pradesh	
40	1	1,111,000	6	14	46	1,011,000	100	1	1	Rajputana (General)	
62	38	1,111,000	1	67	13	1,111,000	27	1	1	Sikkim State	
43	57	14,111,000	10	40	50	1,111,000	101	17	1	Tamil Nadu State	

SUBSIDIARY TABLE IV

Selected occupations, 1921 and 1911.

Order No.	Occupation	OCCUPATIONS DESCRIBED IN		Percentage of Population
		1921.	1911.	
1	TOTAL POPULATION	316,833,231	312,476,014	+ 8
	A.—PRODUCTION OF RAW MATERIALS	331,784,448	327,819,892	+ 12
2	I.—Exploitation of minerals and vegetation	328,882,388	324,862,888	+ 12
	Forestry and agriculture	322,815,019	324,862,888	+ 12
	Fishing and hunting	1,807,321	1,804,388	- 12
	II.—Exploitation of minerals	848,882	888,888	+ 12
	Minerals	888,888	878,882	+ 12
	Quarries of hard rocks	4,848	78,431	- 4
3	Salt, etc.	88,188	78,431	- 12
	B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	33,812,888	33,188,888	- 12
	III.—Industry	33,188,888	33,188,888	- 12
	Textiles	31,888	31,888	- 12
7	Wool, silk and hard materials from the animal kingdom	111,111	111,111	- 12
8	Wool	111,111	111,111	- 12
9	Wool	111,111	111,111	- 12
10	Chemicals	8,812,888	8,812,888	- 12
11	Chemical products properly so called, and analogous	1,111,111	1,111,111	- 12
12	Paper industries	3,333,333	3,333,333	- 12
13	Industries of dress and the toilet	888,888	888,888	- 12
14	Food industries	1,111,111	1,111,111	- 12
15	Construction of means of transport	1,111,111	1,111,111	- 12
16	Production and transformation of physical forces (heat, light, electricity, motive power, etc.)	1,111,111	1,111,111	- 12
17	Other miscellaneous and unclassified industries	1,111,111	1,111,111	- 12
18	IV.—Transport	3,333,333	3,333,333	- 12
19	Transport by air	333,333	333,333	- 12
20	Transport by water	1,111,111	1,111,111	- 12
21	Transport by road	1,111,111	1,111,111	- 12
22	Post Office, Telegraph and telephone services	333,333	333,333	- 12
23	V.—Trade	18,111,888	17,111,888	+ 12
24	Retail establishments of trade, commerce and industries	18,111,888	17,111,888	+ 12
25	Wholesale, commission and export	18,111,888	17,111,888	+ 12
26	Trade in land	1,111,111	1,111,111	- 12
27	Trade in oil, leather and fur	1,111,111	1,111,111	- 12
28	Trade in wool	1,111,111	1,111,111	- 12
29	Trade in metals	1,111,111	1,111,111	- 12
30	Trade in jewelry, bric-a-brac and like	1,111,111	1,111,111	- 12
31	Trade in electrical products	1,111,111	1,111,111	- 12
32	Trade in building materials	1,111,111	1,111,111	- 12
33	Trade in machinery and tools	1,111,111	1,111,111	- 12
34	Trade in foodstuffs and other trade in foodstuffs	1,111,111	1,111,111	- 12
35	Trade in clothing and haberdashery	1,111,111	1,111,111	- 12
36	Trade in furniture	1,111,111	1,111,111	- 12
37	Trade in building materials	1,111,111	1,111,111	- 12
38	Trade in means of transport	1,111,111	1,111,111	- 12
39	Trade in foodstuffs and other trade in foodstuffs	1,111,111	1,111,111	- 12
40	Trade in clothing and haberdashery	1,111,111	1,111,111	- 12
41	Trade in furniture	1,111,111	1,111,111	- 12
42	VI.—PUBLIC ADMINISTRATION AND LIBERAL ARTS	8,888,888	8,888,888	- 12
43	VI.—Public law	8,888,888	8,888,888	- 12
44	Army	888,888	888,888	- 12
45	Navy	888,888	888,888	- 12
46	Air force	888,888	888,888	- 12
47	Police	1,111,111	1,111,111	- 12
48	VII.—Order of Public Administration	8,888,888	8,888,888	- 12
49	VIII.—Professions and liberal arts	8,888,888	8,888,888	- 12
50	Religion	1,111,111	1,111,111	- 12
51	Law	1,111,111	1,111,111	- 12
52	Medicine	1,111,111	1,111,111	- 12
53	Education	1,111,111	1,111,111	- 12
54	Letters and arts and sciences	1,111,111	1,111,111	- 12
55	IX.—UNEMPLOYED	19,888,888	17,888,888	+ 12
56	IX.—Order of Unemployment	19,888,888	17,888,888	+ 12
57	X.—Order of Unemployment	19,888,888	17,888,888	+ 12
58	XI.—Unemployment described occupations (Order of Unemployment)	19,888,888	17,888,888	+ 12
59	XII.—Unemployment	19,888,888	17,888,888	+ 12
60	Unemployment of full, no loss and loss	19,888,888	17,888,888	+ 12

SUBSIDIARY TABLE V.

Occupations of females by orders and selected groups

Group No	Occupation	NUMBER OF ACTUAL WORKERS		Number of females per 1,000 males.	Group No	Occupation	NUMBER OF ACTUAL WORKERS		Number of females per 1,000 males.
		Males	Females				Males	Females.	
1	2	3	4		1	2	3	4	
	TOTAL POPULATION	100 609 843	45,803 719	455					
	A.—PRODUCTION OF RAW MATERIALS	72,334,610	33 701,112	466					
	I.—EXPLOITATION OF ANIMALS AND VEGETATION	72 099,053	33 588 420	466					
	1 Pasture and Agriculture	71,526 809	33,416 903	467		7—Hides, skins and hard materials from the animal kingdom	250,211	59 992	239
	(a) Ordinary cultivation	68 116 127	32,189 510	472	30	Tanners, curriers leather dressers and leather dyers etc	144 733	37 289	238
	Income from rent of agricultural land	2 090 177	1 036 528	380	40	Makers of leather articles such as trunks, water bags, saddlery or harness etc., excluding articles of dress	98 976	21,380	216
	Ordinary cultivators	53 474 170	21 190 716	390	41	Furriers and persons occupied with leathers and bristles brush makers	874	276	315
	Agents, managers of landed estates (not planters) clerks rent collectors etc	239 010	29 220	122	42	Bone ivory horn shell etc workers (except button)	5 628	910	169
	Farm servants	2 252,860	1 067 753	474					
	Field labourers	9 400 210	8 805 284	934		8—Wood	1,239 192	341,814	276
	(b) Growers of special products and market gardening	846 747	602 775	712	43	Sawyers	92 813	5 346	58
	Tea coffee cinchona rubber and indigo plantations	528 830	474 026	898	44	Carpenters turners and joiners etc	834 485	42,800	51
	Fruit, flower vegetable betel, vine areca nut, etc. growers	317 017	128 140	403	45	Basket makers and other industries of woody material including leaves and thatchers and builders working with bamboo seeds or similar materials	311 804	293 650	942
	(c) Forestry	170 045	78 927	464		9—Metals	637 625	87 602	137
	Forest officers rangers guards etc.	34 452	2,108	64	52	10—Ceramics	743,453	341 882	460
	Wood-cutters fire-wood catechu rubber etc collectors and charcoal burners	131 863	75 300	571	55	Makers of glass and crystal ware	2,172	850	391
	Lac collectors	3 730	1,420	381	56	Potters and earthen pipe and bowl makers	501 043	304 008	514
	(d) Raising of farm stock	2,356,238	541 413	230	57	Others (mosaic tile mica alabaster etc., workers)	2 375	1,412	595
	Cattle and buffalo breeders and keepers	343 480	105 286	307		11—Chemical products properly so called, and analogous	372,987	204,217	548
	Sheep goat and pig breeders	134 272	37 440	270	61	Manufacture and refining of vegetable oils	330 154	100 380	570
	Breeders of other animals (horses mules camels, asses, etc.)	9 102	2,075	226	64	Others (soap candles, lac cutch per fumes and miscellaneous drugs)	11,076	4,160	375
	Herdsmen shepherds, goatherds, etc	1,869 324	396 603	212		12.—Food industries	732,059	821,405	1,259
	(e) Raising of small animals	7 332	4 278	582		13—Food industries			
	Birds, bees etc	1 703	614	361	65	Rice pounders and huskers and flour grinders	116 570	615 977	5 284
	Silk worms	5 040	3 664	640	67	Grain parchers etc.	117 464	186 374	1,587
	2. Fishing and hunting	573 144	171,517	299	71	Makers of sugar, molasses and gur	20 365	15,626	767
	Fishing	544 424	162,170	298	73	Brewers and distillers	4 471	2,422	542
	Hunting	28 720	9 347	325	75	Manufacturers of tobacco opium and ganja	22,027	25 230	1 116
	II.—EXPLOITATION OF MINERALS	234,057	112,602	480		13—Industries of dress and the toilet	2,498,204	905,638	363
	3—Minerals	179 783	85 489	476	76	Hat cap and turban makers	3 796	1 302	343
	Coal mines	131,247	74,024	564	80	Washing, cleaning and dyeing	624 049	478 306	766
	Petroleum wells	11 310	796	70	82	Other industries connected with the toilet (tattoos shampoos bath houses etc.)	3,562	7 046	1,978
	Mines and metallic minerals (gold iron, manganese etc.)	37 226	10 860	287	84	14—Furniture industries	10 382	1,684	162
	4.—Quarries of hard rocks—					Upholsterers, tent makers etc	1,500	760	504
	QUARRIES OF HARD ROCKS—[Other minerals (jade, diamonds, limestone etc.)]	31,011	14,026	444	85	15—Building industries	607,942	204,003	336
	5—Salt, etc.	23,263	13,177	568	86	Lime burners cement workers	23 397	14 493	619
	Rock, sea and marsh salt	9 452	3 944	417		Excavators and well-sinkers	120,944	63 780	509
	Extraction of saltpetre, alum and other substances soluble in water	13 811	9,233	669		16—Construction of means of transport	22,081	813	37
	B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	18,027 948	7 717,215	428	93	17—Production and transmission of physical forces (heat, light, electricity motive power etc.) (Gas works, and electric light and power)	9 814	1,700	173
	III.—INDUSTRY	10,685,372	5,040,001	473		18—Other miscellaneous and undefined industries	1,108,128	393,963	356
	6—Textiles	2,455 298	1,575 378	642	90	Makers of bangles, or beads or necklaces of other material than glass and makers of spangles, rosaries lingams and sacred threads	32,600	20 370	620
	Cotton spinning cleaning and pressing	148 240	87 434	590		IV.—TRANSPORT	1 765 592	204,808	116
	Cotton spinning	115 030	352,670	3 060		20—Transport by water	336,406	13,315	39
	Cotton spinning and weaving	1,539 784	732,084	475		21.—Transport by road	857 779	152,955	178
	Jute spinning pressing and weaving	2,2,974	52,982	209		22.—Transport by rail	495 986	36,150	73
	Rope twine and string	90 157	114,134	1 208		23—Post Office, Telegraph and Telephone services	75,036	2,388	32
	Other fibres (cocoanut, aloes flax, hemp straw etc.)	22,403	57 113	2,539					
	Wool carding and spinning	4 018	12 794	3,184					
	Weaving of woollen blankets	50 634	27,883	408					
	Weaving of woollen carpets	5 087	1 719	287					
	Silk spinners	9 001	17 706	2, 29					
	Silk weavers	27 033	28,082	1,073					
	Hair camel and horse hair	330	500	1,447					
	Dyeing bleaching printing preparation and sponging of textiles	61 540	33,002	510					
	Lace crêpe embroidery fringes etc. and insufficiently described textile industries	118,014	50 945	473	120				

NOTE.—There are no female workers in Order 19—Transport by air

CHAPTER XII.—OCCUPATION

SUBSIDIARY TABLE V.—contd

Occupations of females by orders and selected groups—contd.

Occupation	TOTAL OF ACTUAL WORKERS		Number of females per 1,000 males	Occupation	NUMBER OF ACTUAL WORKERS		Number of females per 1,000 males
	Males	Females			Males	Females	
V.—FARMING	2,871,979	2,418,400	643	6.—PUBLIC ADMINISTRATION AND LEGAL ARTS	8,861,774	881,000	132
64.—Banks, establishments of credit, exchanges and insurance (Bank managers, clerks, brokers, exchange and insurance agents, money lenders and others and their employees)	200,000	94,000	106	VI.—PUBLIC FORCE	903,170	60,213	47
65.—Bankers, commission and export (Bank clerks, commission agents, commission brokers, etc., and their employees)	84,000	4,700	94	61.—Army	600,700	8,861	8
66.—Trade in textiles (Trade in piece goods, cloth, etc., and their employees)	418,000	10,000	200	62.—Navy	127	30	100
67.—Trade in cloth, leather and fur (Trade in piece goods, leather, fur, etc., and their employees)	70,000	10,000	100	63.—Air Force	000	0	4
68.—Trade in wood (Trade in wood, etc., and their employees)	71,000	11,000	100	64.—Police	600,000	60,000	77
69.—Trade in metals (Trade in metals, etc., and their employees)	90,000	4,000	100	VII.—ORDERS AND PUBLIC ADMINISTRATION	931,000	74,000	79
70.—Trade in pottery, bricks and tiles	10,000	10,000	100	VIII.—POSTS AND TELEGRAPH ARTS	1,700,000	831,000	100
71.—Trade in chemical products (Trade in chemicals, etc., and their employees)	60,000	0,000	000	65.—Telegraph	800,000	100,000	107
72.—Trade in other goods (Trade in other goods, etc., and their employees)	200,000	100,000	100	66.—Law	90,000	1,000	71
73.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	67.—Medicine	100,000	10,000	60
74.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	68.—Education	80,000	60,000	100
75.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	69.—Agriculture	800,000	60,000	100
76.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	70.—Lumber and other trades	800,000	60,000	100
77.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	IX.—INDUSTRIAL ARTS	8,000,000	8,000,000	100
78.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	X.—OTHER INDUSTRIES	8,000,000	8,000,000	100
79.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XI.—OTHER INDUSTRIES	8,000,000	8,000,000	100
80.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XII.—OTHER INDUSTRIES	8,000,000	8,000,000	100
81.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XIII.—OTHER INDUSTRIES	8,000,000	8,000,000	100
82.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XIV.—OTHER INDUSTRIES	8,000,000	8,000,000	100
83.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XV.—OTHER INDUSTRIES	8,000,000	8,000,000	100
84.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XVI.—OTHER INDUSTRIES	8,000,000	8,000,000	100
85.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XVII.—OTHER INDUSTRIES	8,000,000	8,000,000	100
86.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XVIII.—OTHER INDUSTRIES	8,000,000	8,000,000	100
87.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XIX.—OTHER INDUSTRIES	8,000,000	8,000,000	100
88.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XX.—OTHER INDUSTRIES	8,000,000	8,000,000	100
89.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXI.—OTHER INDUSTRIES	8,000,000	8,000,000	100
90.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXII.—OTHER INDUSTRIES	8,000,000	8,000,000	100
91.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXIII.—OTHER INDUSTRIES	8,000,000	8,000,000	100
92.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXIV.—OTHER INDUSTRIES	8,000,000	8,000,000	100
93.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXV.—OTHER INDUSTRIES	8,000,000	8,000,000	100
94.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXVI.—OTHER INDUSTRIES	8,000,000	8,000,000	100
95.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXVII.—OTHER INDUSTRIES	8,000,000	8,000,000	100
96.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXVIII.—OTHER INDUSTRIES	8,000,000	8,000,000	100
97.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXIX.—OTHER INDUSTRIES	8,000,000	8,000,000	100
98.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXX.—OTHER INDUSTRIES	8,000,000	8,000,000	100
99.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXXI.—OTHER INDUSTRIES	8,000,000	8,000,000	100
100.—Trade in other goods (Trade in other goods, etc., and their employees)	100,000	100,000	100	XXXII.—OTHER INDUSTRIES	8,000,000	8,000,000	100

Occupations in selected cities.

CITIES.	NUMBER PER 10 000 SUPPORTED BY EACH CLASS AND SUB CLASS OF OCCUPATIONS																	NUMBER PER CENT OF		Number of female workers per 100 males.
	A. Production of raw materials.	I. Exploitation of animals and vegetation.	II. Exploitation of minerals.	B. Preparation and supply of material substances.	III. Industry.	IV. Transport.	V. Trade.	C. Public administration and liberal arts.	VI.—Public force.	VII. Public administration.	VIII. Professions and liberal arts.	D. Miscellaneous.	IX. Persons living on their income.	X. Domestic service.	XI. Independently described occupations.	XII. Unproductive life.	All occupations.	Actual workers.	Dependents.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Calcutta	661	559	2	4 740	1 769	947	2 033	1 145	97	371	577	3 545	126	1 003	2 150	250	10 000	58	42	11
Bombay	120	112	8	5 750	3 029	914	1 813	570	123	160	237	3 554	92	510	2 845	107	10 000	61	30	17
Madras	537	532	5	5 059	2 575	1 123	1 901	1 240	109	304	707	2 504	377	575	1 480	126	10 000	39	61	17
Rangoon	339	333	6	6 038	2 914	1 401	2 233	975	157	300	518	2 048	84	524	1 298	142	10 000	62	38	12
Delhi	833	816	17	6 800	3 694	800	2 100	1 008	276	273	459	1 553	141	710	503	109	10 000	45	55	11
Ahmedabad	233	232	1	5 548	4 985	202	1 301	600	129	155	411	2 474	176	561	1 010	121	10 000	46	54	20
Agra	814	814		0 170	3 650	881	1 630	901	263	353	345	2 019	85	934	893	137	10 000	40	60	12
Howrah	680	680	6	5 718	3 780	904	1 034	541	54	108	310	3 055	100	518	2 203	144	10 000	50	44	13
Canapore	455	455		4 805	2 350	879	1 660	945	190	132	623	3 705	54	904	2 400	188	10 000	40	51	14
Kanich	545	535	10	4 671	1 739	800	2 060	1 540	630	457	450	3 238	53	934	1 090	247	10 000	48	52	7
Lahore	1 043	1 041	2	5 427	1 058	1 001	1 568	1 307	424	308	515	2 923	180	1 054	712	207	10 000	45	55	6

SUBSIDIARY TABLE VII.

Special statistics for Railways and the Irrigation, Post Office and Telegraph Departments.

(i) Number of persons employed in the Railway Department on the 18th March, 1921

Particulars, with or without	PERSONS DIRECTLY EMPLOYED										PERSONS INDIRECTLY EMPLOYED										GRAND TOTAL	
	EMPLOYED IN THE RAILWAY DEPARTMENT					EMPLOYED IN THE RAILWAY DEPARTMENT					EMPLOYED IN THE RAILWAY DEPARTMENT					EMPLOYED IN THE RAILWAY DEPARTMENT						
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total				
1. General	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
2. Locomotive	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
3. Signal	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
4. Station and Office	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
5. Railway	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
6. Marine	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
7. C. P. and Serv.	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
8. Other	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
9. Marine	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
10. S. W. P. Two-ton	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
11. Public	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
12. United Farmers	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
13. Marine	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
14. Central India (Agency)	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
15. Central India	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
16. Central India	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
17. Central India	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
18. Central India	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
19. Central India	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
20. Central India	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
21. Central India	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				
22. Central India	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	1,293	1,213	80	2,486				

Special statistics for Railways and the Irrigation, Post Office and Telegraph Departments.

(a) Number of persons employed in the Irrigation Department on the 18th March, 1921

PERSONS DIRECTLY EMPLOYED										PERSONS INDIRECTLY EMPLOYED										GRAND TOTAL									
Serial Number	PROVINCE, STATE OR AGENCY	OFFICERS		UPPER SUB-ORDINATES		LOWER SUB-ORDINATES		CLERKS		PEONS AND OTHER SERVANTS		COOLIES		TOTAL		CONTRACTORS		CONTRACTORS' REGULAR EMPLOYEES		COOLIES		TOTAL		Euro-peans and Anglo-Indians		Indians		Grand Total	
		Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	Indians	Euro-peans and Anglo-Indians	
1	INDIA.	229	535	12	1,900	11	5,542	36	5,068	10	34,598	38,487	304	85,448	11	7,485	1	12,734	101,870	12	182,088	318	287,537						
1	Baluchistan	1	2	4		13		12		153			1	184	2	12		10	102	2	214	3	308						
2	Bengal	11	37	81		131		1	400	8	2,272	50	20	2,070	5	413		147	10,018	5	10,908	25	13,878						
3	Bihar and Orissa	5	18	1	43	335		5		2,280		500	6	3,277	1	507		1,532	5,925	1	7,060	7	11,237						
4	Bombay	20	44	1	150*	1	247			1	0,480	0,207	20	10,137	1	756	1	833	20,003	2	23,462	31	44,029						
5	Burma	5	3	1	82	21	2	34		124		248	8	462		50		10	4,038	4	4,107	8	4,500						
6	C P and Berar	24	29	83		277	4	101	2	1,860		13,244	30	15,003		242		102	16,521	17	155	30	32,758						
7	Madras	10	82	3	220	3	332	681	3	5,301		1,450	23	8,174		1,007		2,045	10,184	10	916	28	29,090						
8	N W F Province	5	13	24	1	68		75		1,002		128	0	1,340		101		01	1,380	1	578	0	2,018						
9	Punjab†	86	133	1	256	1	2,608	26	1,409	0,067		3,805	114	16,803		1,582		2,108	25,401	20	211	114	40,070						
10	United Provinces	39	71	3	51	388	2	1,795	2	4,000		1,475	40	7,780	1	1,300		1,470	20,017	1	28,709	47	30,579						
11	Baroda State			1				16		28		15	60		7		1		130		138		198						
12	Cochin State			1		3		3		20		84	112		3				60		63		175						
13	Gwalior State			40		215		55		100		76	607		1	135		297	1,569	1	1,041	1	2,448						
14	Hyderabad State	4	31	2	117	2	210	1	224	012		4,036	9	5,650		334		468	18,734		19,020	0	25,055						
15	Kashmir State					13	21	10		239		87	387		73		0		904		1,073		1,400						
16	Mysore State	2	34	30	3	279		153		282		1,178	5	1,050		735		1,803	0,030		8,074	5	10,630						
17	Rajputana (Agency)†	2	10	31		60		75		370		3,229	2	3,784		35		1,062	812		1,809	2	5,083						
18	Travancore State			3		224		29		21		33	819		62		23		350		435		753						

* Includes 1 Japanese

† Includes 11 Indian

‡ Includes 11 Indian

* Includes 1 Japanese

† Includes Delhi

‡ Includes Ajmer Merwar

SUBSIDIARY TABLE VII—cont'd

Special statistics for Railways and the Irrigation, Post Office and Telegraph Departments—could

[illegible]

五、六、七、八、九、十、十一、十二、十三、十四、十五、十六、十七、十八、十九、二十、二十一、二十二、二十三、二十四、二十五、二十六、二十七、二十八、二十九、三十、三十一、三十二、三十三、三十四、三十五、三十六、三十七、三十八、三十九、四十、四十一、四十二、四十三、四十四、四十五、四十六、四十七、四十八、四十九、五十、五十一、五十二、五十三、五十四、五十五、五十六、五十七、五十八、五十九、六十、六十一、六十二、六十三、六十四、六十五、六十六、六十七、六十八、六十九、七十、七十一、七十二、七十三、七十四、七十五、七十六、七十七、七十八、七十九、八十、八十一、八十二、八十三、八十四、八十五、八十六、八十七、八十八、八十九、九十、九十一、九十二、九十三、九十四、九十五、九十六、九十七、九十八、九十九、一百。

SUBSIDIARY TABLE VII—*concl'd*Special statistics for Railways and the Irrigation, Post Office and Telegraph Departments—*concl'd*(iii) Number of persons employed in the Post Office and Telegraph Department on the 18th March, 1921—*concl'd*

Serial Number	RAILWAY MAIL SERVICE										COMBINED OFFICES																			
	Unskilled labour establishment, including line-coolies, cable guards, battery-men, telegraph messengers, peons, and other employees										Road establishment consisting of overseers, runners, clerks and booking agents, beatmen, axes, coachmen, bearers and others																			
	Post Office		Telegraph Department		Post Office		Telegraph Department		Supervising Officers including Superintending Agents and Inspectors of Sorting		Clerks of all kinds		Sorters		Mail guards, mail agents, van peons, porters etc		Messengers		Other servants		Signallers		Messengers and other servants		TOTAL					
	Europeans and Anglo-Indians	Indians		Europeans and Anglo-Indians	Indians		Europeans and Anglo-Indians	Indians		Europeans and Anglo-Indians	Indians		Europeans and Anglo-Indians	Indians		Europeans and Anglo-Indians	Indians		Europeans and Anglo-Indians	Indians		Europeans and Anglo-Indians	Indians		Europeans and Anglo-Indians	Indians		Europeans and Anglo-Indians	Indians	
1 Assam	1	5 043	1	5 111	22 657	1	81	6	123	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
2 Baluchistan																														
3 Bengal																														
4 Bihar and Orissa																														
5 Bombay																														
6 Burma																														
7 C P and Berar																														
8 Coorg																														
9 Madras																														
10 N W P Province																														
11 Punjab (c)																														
12 United Provinces																														
13 Sindh																														
14 Central India (b and c)																														
15 Cochin State																														
16 Orissa State																														
17 Hyderabad State																														
18 Kashmir State																														
19 Mysore State																														
20 Rajputana (b and c)																														
21 Travancore State																														

(a) Includes figures for the Telegraph Department also

(b) Figures for combined Posts and Telegraph offices have not been shown separately

(c) Includes Delhi

(d) Includes Ajmer, Merwara,

(b) Figures for combined Posts and Telegraph offices have not been shown separately
(c) Includes Delhi
(d) Includes Ajmer, Alwar, etc.

19

19

19

Particulars of Establishments employing 20 or more persons in 1911 and 1921.

INDUSTRIES																	
All Industries		I Growing of special products	II. Mines	III. Quarries of hard rocks	IV Textiles and connected industries	V Leather etc., industries	VI. Wood, etc., industries	VII. Metal industries	VIII. Glass and earthenware industries	IX. Industries connected with chemical products	X. Food industries	XI Industries of dress	XII. Furniture Industries	XIII. Industries connected with building	XIV. Construction of means of transport and communication.	XV. Production and application of physical forces.	XVI Industries of luxury
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Latabil females employing 20 or more persons	1021 2,608,123	817 340	260 325	28,138	780,115	13,530	31,133	184,880	78,063	102,382	93,983	8,480	5 877	27 672	184,173	14 825	50,430
		1011 2,105 844	810 407	224 087	12,273	557 560	13,012	29 007	71,045	49 400	40,358	74 401	10 189	3 372	22 103	125 117	8 100
Number of persons employed	1021 113 203	12 082	9 511	988	29 011	1 336	2,804	10 805	3 583	9 178	9 154	1,005	752	1 184	14 316	1 538	6,107
		1011 70 231	11,073	6,075	311	20,023	934	2,140	5,120	1 400	3 333	5,355	872	265	720	5,457	670
(a) Direction supervision and clerical	1021 701,203	16,123	87,170	4 077	320,108	3 189	7 871	74 457	22 118	23 944	17 815	5 480	2 941	6,781	83 058	6 611	30,080
		1011 5,1778	18,116	71,095	1,218	250,580	5 742	11,500	34 115	10 632	12 023	11,213	7 203	2 102	3 292	80 805	1 751
(b) Skilled workmen	1021 1 703 531	788 233	183 614	20,473	402,060	9 903	20,158	70 018	52 302	60,200	65 034	1 003	2,184	10 407	66 200	7 743	11,150
		1911 1,480,815	770 088	146 317	10 744	296 080	9 036	15 121	31 801	37 411	34,602	57 803	2 054	1 005	18 150	38,853	3 112
(c) Unskilled labour	1911 313	913	321	41	408	13	61	30	310	151	201	34	17	403	30	59	12
		1911 341	896	629	303	382	178	45	104	260	101	139	123	52	339	41	34
(1) Full time more per 1 000 adult men	1921 141	170	123	112	156	87	49	143	123	61	72	102	118	182	23	30	73
		1911 191	218	107	123	191	147	50	61	159	91	30	452	315	111	23	10
(11) Children (1 below 14) per 1 000 adults																	

APPENDICES

- APPENDIX I—Attitude of the Public and the influence of Non-co-operation
- „ II—A mathematical aspect of Migration
- „ III—Present day tendencies in the Religious sphere
- „ IV—Account of the Terapanthi Sect of Svetambar Jains
- „ V—Buddhism in Burma
- „ VI—Female Infanticide
- „ VII—The size and sex constitution of the average family and the fertility of marriage life
- „ VIII—Some articles and paragraphs in the Provincial Reports dealing with special subjects

APPENDIX I

Extracts from the Provincial Reports on the attitude of the Public and the influence of Non-co-operation

The public were generally indifferent to the census. Only in a few very remote places the Assam idea survived that the numbering of the people was a prelude to some new imposition. The non-co-operation movement caused little trouble. Many educated people gave loyal co-operation, especially in towns. Supervisors and enumerators often objected to appointment—not unnaturally, as the posts were unpaid and expenses had often to be incurred from their own pockets for writing and house-numbering materials. Many (including one tea-planter in Kamrup) had to be warned of the Census Act provisions and some few were brought to trial, but the usual result was acquittal or discharge with a warning. In Kamrup, however, four enumerators were fined Rs. 10 each under the Census Act, one case being for refusal to accept an appointment letter and the other three for neglect of duty. One enumerator, a dismissed tea garden employé, was fined Rs. 5 in Lakhimpur for destroying his papers.

In all administrative measures which concern the indigenous population of the Province, Baluchistan the co-operation of the leading men of the tribes is always sought and secured, and the same principle was followed in regard to the present census as it was done on the two previous occasions. The special schedule used in the Tribal areas was the one which had the approval of His Highness the Khan of Kalat, the Jam of Las Bela, the principal chiefs and the District Officers. In the Administrative areas the work was done by paid officials of Government, chiefly *patwaris*, under the supervision of local officers and no difficulties were experienced owing to the hearty co-operation of officers. It was lucky that Baluchistan was not affected by the non-co-operation movement in India and no objections were raised nor any difficulties arose throughout the Operations. Any representations that were made by the local communities were immediately attended to. Special care was taken to meet the wishes of the Sikh Community, the Arya Samajists and the Shia section of Muhammadans, with respect to recording their religion, sect and castes, etc., the lines adopted by the Punjab Census Department being followed in every respect.

The attitude of the general public towards the census was one of indifference except when Bengal. the records of caste aroused excitement. There was in general no obstruction and little provocation offered to enumerators except by a few Marwaris and others who held the opinions of non-co-operators in Calcutta. Many objected to the record of their castes by the name in common use and a few to the record of their occupations, the Baishnabs of Nabadwip for example refusing to be recorded as beggars and their occupation being ultimately entered as "*Hari nam Kirtan*," singing of the name of Hari. Although followers of the non-co-operation movement did not, even before the pronouncement of Mr. Gandhi in favour of co-operation with the census, go to the extent of refusing to give information regarding themselves and their families, and the movement therefore did not in any way vitiate the proceeding of enumerators, there is no doubt that it prompted many who had been selected as supervisors and enumerators, to discontent at their appointment, specially in towns. In almost every district there were enumerators whose refusal or objection to serve is traceable to non-co-operation. Some said so openly but the large majority took refuge in excuses. A burst of activity in the movement coming after the enumerators had been appointed caused some slight dislocation in the preparations especially in places where it had been intended to employ students, e.g., in Krishnagar and in Calcutta. One District Census Officer reports that amusement expressed the attitude of individuals towards the census in some parts, and they got it in attempting to avoid being counted or to be counted more than once, giving foolish answers to questions, etc. This was in Bankura. Such an attitude is not often found in Bengal and is never likely to cause serious trouble as it might in other countries.

The general standard of accuracy in enumeration is reported to have improved down Bihar and Orissa to the year 1891 when it "left but little room for further improvement," and except in the case of some of the Feudatory States it is improbable that any noticeable improvement has taken place since then so far as the exhaustiveness of the enumeration is concerned. On the present occasion a special difficulty was experienced. The census fell at a time of much political excitement when the non-co-operation movement, the avowed object of which was to paralyze the activities of Government, was in full swing. In these circumstances it was inevitable that anxiety should be felt as to the success of the census which is taken under the orders of Government but which depends for its success and accuracy on the voluntary co-operation of a host of unofficial and unpaid workers. A few days before the census Mr. Gandhi published a notice to the effect that it was the duty of Indians to co-operate with Government in the matter of the census, but the notice, while it made it clear, that opposition to the census was not part of the non-co-operation programme, was published too late to produce much effect. Although however the movement was not avowedly hostile to

the census, it created an atmosphere in which it was difficult to make headway with the preliminary arrangements. Persons selected as supervisors and enumerators were only too glad to be able to say that it was against their conscience to accept appointment, and much valuable time was wasted in finally selecting the staff. Moreover even after appointment, many of the staff still found it difficult to take any interest in their work, and the District Census Officers had a very arduous task in keeping the work up to date. The fear that the public might "go on strike" on the census night and refuse to answer the questions prescribed proved quite unfounded and there was hardly a single case of deliberate obstruction by members of the census staff. No enumerator in Gaya burnt his enumeration book, but it was quickly re-written and the man proved to be mad. In Palawan one supervisor deliberately caused delay in handing over his papers. These were the only cases of obstruction reported. The danger of the non-co-operation movement therefore lay not in active attempts to wreck the census, but in the indifference it encouraged in the staff. In Patna City the difficulty was perhaps greater and the preliminary arrangements more delayed than anywhere else. The gentlemen originally selected (with some honourable exceptions) showed such a lack of interest that it was found necessary at the last moment to transfer the chief responsibility to the police and this eleven-hour change naturally did not tend to efficiency in enumeration. Yet even here it is doubtful if the commonsense exceeded a thousand or two. The town was marvellously free from plague on the present occasion which had been the enemy at previous censuses and, if one difficulty is set against the other it may be said that the enumeration here, if no better was at least not worse than on previous occasions. Elsewhere also the difficulties engendered by non-co-operation were generally greater in the towns where people are more politically minded than in the villages. But the proportion of persons who live in towns is very small, being only 37 per cent of the total population.

Survey

At previous censuses it had always been possible to secure the services of private persons as supervisors. But this census the non-co-operation movement and the rise in the cost of living rendered it most difficult and in many cases impossible to obtain them. Moreover even where they did come forward they were in many cases mere puppets, content to be entered on paper as supervisors, but unwilling to do anything tall. In the matter of enumerators the two great obstacles were the non-co-operation movement and the strike of Talata. The former caused a widespread withdrawal of many who had consented in May and June to have their names put down in the General Village Register. It was not worth while to obtain from districts complete return of withdrawals. But they must have amounted to thousands. In one Taluka alone 60 withdrew in one week, and the whole process went on gradually throughout the autumn and winter. It commenced with an article in the Kesari in which the Editor to whom the point seems to have been referred by a correspondent, declared his opinion that, while information legally demandable by law could not be refused, no person ought voluntarily to assist Government by undertaking census duties. On the other hand it afterwards became known that Mr. Gandhi in Gujrat had privately expressed his opinion that the census was an important national work and should be assisted. This was dictum presumably became known earlier in Gujrat than in the Deccan and Konkan, since the difficulty of securing staff was less keenly felt in the North than in the South. The Talati strike was really more serious than the political movement. It took place in the autumn just when house-numbering work was to be done, and in some of the Konkan districts rendered it necessary to elect the numbering and write up the House and Block Lists by paid agency. Fortunately the strike was over before the really critical enumeration time. Otherwise there might have been no census at all.

Central Provinces
and Berar

From the preliminary stages of the census up to the taking of the final census the non-co-operation movement gave rise to considerable anxiety. As at the preceding census enumerators were asked to do their work out of public spirit and without any monetary reward. It was, therefore, not difficult to persuade a number of them that a ready occasion for embarrassing Government had presented itself. It was only towards the close of the operations that the leader of the movement announced that non-co-operation should not interfere with the movement, and as Mr. Gandhi actually held a political meeting in Nagpur at the unusual hour of 11 p.m. on the census night, when it was important for the accuracy of the census that the bulk of the population should remain in their homes, it can be imagined that the rank and file of his followers were passively if not actively hostile. Arrangements were made beforehand for approximate figures to be obtained in the event of any organized refusal to give information, but such refusals were little in evidence. The inhabitants of one village in the Bhandara district insisted on describing themselves as non-co-operators in the occupational columns and a few of the Nagpur Khatris or weavers, who, only a few days after the final day of the census broke out into open riot, declined to give particulars of themselves and their families. In Kampega the inhabitants of one mohalla during the preliminary enumeration declined to answer questions, but they were ultimately won round by the district officials. The patwaris of the Chhindwara and Chanda districts went on strike shortly before the census day but completed their census work under threat of the penalties of the Census Act. In general, the attitude of the public in those places where political propaganda hostile to Government were most

powerful, was more one of apathy than of actual hostility, and the constant efforts of the district officials were necessary to keep the census staff up to the mark. As the work was voluntary, prosecutions under the Census Act were kept as low as possible and only numbered 31, but the number of people who either declined to act as enumerators, or after agreeing to act gave somewhat transparent excuses for ceasing to do so, was considerable, and it was only by providing a liberal reserve of enumerators that the final enumeration was ultimately carried out successfully. It may, however, be doubted whether this would have been possible if the census had been taken a few months later.

The attitude of the public was generally friendly, "non-co-operation" affected the work to **Madras** a surprisingly small extent, though from several districts I had reports that enumerators were reluctant to do gratuitous work. Except, however, in one or two districts, *e.g.*, Guntūr and Coimbatore, it was expressly stated that this was not due to non-co-operation but was merely disinclination to undertake work for which no remuneration was offered. The public, however, made no difficulty about supplying the information required of them, and though Collectors found it necessary to sanction 39 prosecutions under the Census Act the offence, in almost every case, was that of refusing to do the work of an enumerator. There is no doubt that it has been on this occasion more difficult than ever before to get the work done gratuitously. The offer of a certificate for good work no longer proves an attraction strong enough to induce men to sacrifice their leisure, and in some cases their cash.

The masses are now familiar with the institution of census, which recurs every ten years, without any harm resulting to any body. On the whole the attitude of the public towards **North West Frontier Province** the operations was all that could be desired. It was apprehended that non-co-operation movement, which was in full swing at the time of the census, might give trouble in connection with it, but the fears proved groundless, and the attitude of the people was as friendly as is possible under the circumstances, in an educationally backward province like the North-West Frontier Province.

The Indian Census Act of 1920 provided the necessary authority for making all enquiries **Punjab** necessary to the census and for appointing census officers, similar enactments were passed in all the Punjab States. Throughout the operations no punitive actions under the Act were found to be necessary, and mere threats of putting it into operation in the few cases where census officers or others appeared to be obstructing the census proved sufficient to convince them of the futility of their attitude. The general public are apathetic as regards the census and its objects but are quite accustomed to its decennial repetition and answer the questions readily without any absurd suspicions as to ulterior motives, such opposition as there was to the 1921 census arose, not from ignorance and suspicion, but from mere slackness and, in a few cases, from a desire to hinder any Government activity whatever its nature. At former censuses it was thought an honour to be employed and there was no lack of assistance, but now the work of an enumerator is regarded as irksome and appointment is avoided rather than sought, once they had been appointed, however, the enumerators of 1921 carried out their duties without contumacy if without enthusiasm. Active opposition to the census was at one time thought to be possible on account of the large numbers of persons who professed allegiance to the political discontents who termed themselves non-co-operators, but the non-co-operators never turned their organised attention to obstructing the census, and one of their most prominent leaders of the time pronounced in favour of assisting it a few days before it took place, that announcement may have affected the attitude of the general public on the actual date but came too late to affect the census administration as all census officers had been appointed and trained long before. The most serious obstacles were encountered in urban areas where the spirit of slackness was most marked, some leading men in Delhi city showed an extremely bad example in declining to undertake census duties but their services were dispensed with and they were doubtless disappointed to find that their example was not followed by any considerable section of the community, in Lahore city the enumerating staff at first selected showed such indifference to their duties that it was thought wise to replace many of them by more public-spirited substitutes, unfortunately some of the substitutes were appointed so late that they had not gained a full insight into their duties by the time of the final enumeration. At one time the revenue staff was slightly affected by a ripple of agitation, and attempts were made by outsiders and discontented spirits amongst them to use the census as an opportunity for pressing their claims to higher remuneration, fortunately the majority recognised that Government was doing its best for them in the time of scarcity and high prices which followed as an aftermath of war, good sense prevailed, and in the end the loyal co-operation of the whole revenue staff was such as to deserve the same praise as had been meritoriously earned on previous occasions. Though concerted opposition never appeared and isolated attempts at opposition failed ingloriously, yet there is every indication that in future censuses less and less support can be expected from honorary workers, in the stress and striving of competitive life, which must accompany all political and economic progress such a tendency cannot be deplored but it must eventually lead either to a narrowing of the scope of census enquiries or to a great increase in the cost of operations.

The attitude of the public towards the census was less satisfactory—in the British **United Provinces** districts, not in States—than in 1911. Much trouble was caused in cities and towns but not

in villages by the "non-co-operation" movement. Non-co-operators endeavoured to obstruct in two ways —

- (1) by refusing to act as census officials
- (2) by refusing as heads of families to give the information necessary to enable the schedules to be filled up

As to the first form of obstruction, recusants were replaced by officials and the well-disposed, or were themselves brought to reason by prosecution or the threat of prosecution, according to the administrative methods followed in each district. As to the second form, the information needed can always be obtained in other ways but where prosecution was undertaken promptly it was unnecessary to resort to these. The movement gave much extra work and anxiety to District Census Officers, but I am convinced that it has not affected the accuracy of the figures. As soon as it was apparent that trouble of this kind was impending, Government at my instance instructed District Officers to prosecute for obstruction under the Census Act directly it occurred and as a matter of course

DIX II

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Extract from Chap

It is, so far as some writers enjoy, long as the facts are 115 per cent of the case of Multan, the Kalma State, is Rawalpindi than impossible fallacy, arising under the term "impossible that an event might take more than 115 per cent of the time shall attempt to establish forth In its entirety by examining the figures

Table showing the percent given area who were (o that area

Area.

1. The world
2. India (1911)
3. The Punjab (1921)
4. Average British Dis
trust or State in the
Punjab (1921)
5. A point on the earth's
surface

increases as the agricultural or economic level rises. Now, just as there is a difference to the average of a district of foreign-born Muslims as compared with the districts or States where the law is true as a whole, to what extent it holds in the Punjab. If the law is true in the Punjab, then the correlation between the law and the fact of foreign birth is applicable even in the Punjab.

The equation of the population of

We have thus reached the percentage of immigration, the size or population to be subtracted from the regression equation point carried out, m

In closing this I
show the importance
fallacious judgment

the speedy completion of the work that they are prepared to do. The advanced are supported by figures. The population is recorded as 14.6 per cent in the case of the Punjab. The proof that there is a relation between Multan, and into Kalsia, that is, from the necessary inclusion of the population," has been dealt with. A subtler fallacy may lurk in the figures, or even years, to analysis. The compound, and only a preliminary form, forms the principle is simple. The figures shown in the margin

age of persons born in a
would be) enumerated in

land area in square miles.	Percentage of natives
55,000,000	100
1,806,008	99.7
127,800	97.5
3,400	99.1
0	0

or population of the region, but a law of animal movement is an increase in the percentage of the population of the Punjab district or State (13.9%) increase continuously (though the States considered diminish in generalisation covering wide areas for the variations in size which it does hold we can predict the population of a district and $-24 \pm .098$ substantiating between a comparatively limited area expressing the percentage of the population (P) of the District or State, i

$$F = 15.9 - 5.57 \times 1$$

ed the important conclusion that
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What the full correction will be left to future discovery. In section I will merely put before you the foregoing discussion, and then on the problem of migration.

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will never be a single population, but for
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cal phenomenon diminishes. This is a property of space
element in relation to that from the world (0)
percentage of foreign-born does that the percentage
(1), so it seems indisputable function of the area
though as a multiple-valued though it is clear that
area or population. It is important to see to
variations of area, it is in districts and States
which occur in the difference be a negative corre-
lation that there will probably be a negative corre-
lation. Actually we have the percentage of foreign and the law therefore
between the two variables, area $\frac{F}{P}$
and range of variation of area or State in terms
of foreign-born (F) in a District.

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that it is idle to make ded as been corrected for
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The following percentages of persons foreign-born to the areas named and enumerated in the self-same areas are recorded for the 1921 Census —

Area.	Population.	Percentage of foreign-born.
Rohtak District	772,372	12.3
Dujana State	25,833	26.3
Jullundur District	822,544	10.9
Kapurthala State	284,375	17.1

Dujana State is in the Rohtak District. Kapurthala State and the Jullundur District adjoin. Is the percentage excess of foreign-born in the two Punjab States to be attributed to political, sociological and economic causes? I leave the reader to ponder the question for himself in the light of the arguments adduced in this paragraph, and to admit that but for these arguments his answer would have been an immediate but unjustified affirmative.

Should the reader desire, in spite of all that has been said, to compare the percentage of foreign-born persons in one district with that of another which differs widely from it in population, he may provisionally apply the corrections in the following table, which will reduce all districts to a standard population of 500,000.

Table giving the correction to be applied to the observed percentage of foreign-born in any district to reduce it to the common basis of a district of a population of 500,000.

The correction must be subtracted from the observed percentage when it is negative, and added when it is positive.

Population of District.	Correction to percentage of foreign-born (i.e., persons not born in District)
50,000	-2.5
100,000	-3
200,000	-1.7
300,000	-1.1
400,000	-0.6
500,000	0
600,000	+0.6
700,000	+1.1
800,000	+1.7
900,000	+2.2
1,000,000	+2.8
1,100,000	+3.2
1,200,000	+3.9

APPENDIX III.

Extract from Chapter IV of the Baroda Census Report by Mr S Mukerjea on the Present-day tendencies in the Religious sphere

In his chapter on the religious distribution of the population of Baroda Mr Mukerjea, the Census Superintendent, has some interesting remarks on modern tendencies in religion. He writes —“Everywhere the tendencies of religious unsettlement are apparent. Hinduism perhaps, more than the other faiths, shows in its social side and in its religious practices increasing signs of disintegration. Temples are mostly in disrepair. *Bhagans*, *Kirtans*, and *puran lathas* loom much less largely in the life of the present day Hindu than did formerly. Perhaps the very individualised character of Hindu worship has helped this process. Also the too rigorous insistence on forms and rituals, the significance of which has come to be lost on the modern Hindu brought up without a knowledge of his ancient Sanskrit, has led to the serious depletion of true religious emotion. The present-day religion of the Parsis whose lives are becoming more and more of ‘an eclectic ensemble’ half European and half Asiatic, also partakes of this tendency, although Navsari, where the bulk of our Parsis reside, is still the stronghold of orthodox *mobed*-ridden Zoroastrianism. Islam is more alive than either, and there are distinct signs that the immediate future will witness the inauguration of a great Jain revival. But the bulk of Gujarat Musalmans and Jains are still in the grip of Hindu influences. The average Jain is a believer in caste system and even Hindu gods claim a place—though subordinate to their *Trithankaras*—in their worship. In regard to their attitude to the unclean castes, the Jains share to the full—and even certain sections of Musalmans and orthodox Parsis as well—the prejudices of the unredeemed Hindu.

(a) *Religious Nationalism* —But if the general evidences indicate that great ignorance of their religion at present exists among Indians, there is on the other hand a very strong and growing ‘sentiment’ for the old faiths, which has been now reinforced by the political nationalism of the present times. Dr J N Farquhar very aptly calls this feeling ‘Religious Nationalism’. It is expressed generally in educated discussions in undisguised hostility towards what it calls the materialism of Western Civilisation. This spirit of antagonism is not entirely of recent origin. It perhaps began with Dayanand’s violent disputations with Christian Missionaries and Muslim Moulvis, brought on as much by religious patriotism, as by the ignorant attacks of the latter on the cherished ideals of the Hindus. Since his time, Aryas,* Theosophists and Dharma Mahamandal propagandists have fanned the flame. Much of this feeling is ignorant and even insensate. For out of a hundred that come to religious gatherings and applaud the perfervid patriot, only one makes a sincere effort to study his own religion. The Brahmo-Samaj has however consistently set its face against this extravagant *laudatio temporis acti*. As a result it has been reviled as pro-Christian, denationalised. Its success has been also seriously hampered by its tolerant and receptive attitude towards all religions. Formerly this violent religious chauvinism of the general body of educated Hindus was directed not only against Christianity but also Islam. Now the new orientation in politics has brought about a *rapprochement* with Islam. As a result, the Jain and Muslim are at present accepted with much good will, the Parsi also but perhaps a little more doubtfully. The Christian however is still barred as the victim of alien ideals. As the Revd C F Andrews points out in his *Renaissance in India*, this uprising of feeling in behalf of the traditional faith set itself in link with a general awakening of the East when the Russo-Japanese War resulted in the victory of an Asiatic race.”

Speaking of the influence of Mr Gandhi on religious thought he proceeds —“In British India, his political programme has been the cause of profound disagreement amongst the *intelligentsia*. In this State we are chiefly concerned with the religious and social implications of his movement, and in these respects, it is idle to ignore the fact that most of the people here have been immensely moved at least by his personal influence. With the vast majority of Gujaratis, he is regarded as a saint. Not the least tribute to the purity of his motive and the lofty sincerity of his character was contained in the recent judgment which has sent him for a political offence to incarceration. The special turn which his movement has given to the religious life of the people was to rescue it from antagonism towards Islam, and secondly to set men’s minds towards the removal of the taint of untouchability and the uplift of the depressed classes. In its special attitude towards Christianity and its Founder, the Gandhi movement provides also a refreshing contrast to that spirit of bigoted intolerance which characterised the early stages of Hindu revivalism. His own genuine reverence for the Personality of Christ and the teachings of the Bible has done much towards softening the old bitterness. How far these consequences will be permanent, time alone can show. One wishes that the *entente* with

* There is no suggestion in this statement that Aryaism is an anti-British movement. That charge has been effectively refuted by Mr Blunt *vide U P Report 1911*, pp 137-136

Islam were founded less on the angry politics of the moment and more on the sincere recognition of the cultural affinities of the two great systems of Asiatic religion. Reports vary as to the results of the special campaign against untouchability. It is stated that in South Gujarat, where this part of the programme was seriously pursued, even the Dublas refused to have anything to do with Kanbis, after the latter decided to let in the Dheds to their houses. Within Baroda State, the movement is of much older date and has always had the active sympathy of the authorities. The Dheds are admitted into public offices and courts and taken into the subordinate ranks of the services. But the bar against them in schools and libraries still continues. As pointed out above, even the Parsis are at one with the orthodox Hindus in this matter. It is one of the ironies of the religious situation in Gujarat that Vaishnavism, which in other parts of India has concerned itself with the uplift of the depressed and the lowly has here become the stronghold of obscurantism. Coming to the third point, its attitude towards Christianity it is believed that the reaction of this new national consciousness will result in the development of an Indian Christianity. The endeavours made in South India and in Bengal towards this end have had only faint echoes amongst Gujarat Christians. Perhaps when a higher type of education has developed indigenous leadership amongst them and enabled them to do without the leading strings of missionaries, then will be the time for work in this direction. The Christianity of India says Revd. E. J. Thompson, one of the acutest Christian minds that have been engaged on the modern Indian problem, when it has sloughed its present apathy and mendacity and poverty of manliness will help Western Christianity which has made so many mistakes to know God and Christ better. The Gospels teach a simplicity of life and of access to God which Western Christianity has overlaid. We can see and, seeing rejoice that Indian Christianity will have at least a Vedantist tinge." It is to that simplicity and along with it to that spirituality which Mr Gandhi conceives to be the special heritage of India, to which he has exhorted his disciples to turn. But in his teachings there is also an unrelaxing austerity of mood which would rule out all secular cultural efforts and all modern influences. This is sought to be justified by his followers on the ground that the urgency of moral reformation is so great that there is no time for ornamental activity.

(c) *Islamic and Jaina reforms* — As in Hinduism, so also in other religions, "this mounting spirit of nationalism and community spirit" has allied itself with a general movement back to the origins, the spirit which underlies the overlaying tradition, the present practices and evils of the old religions. There is talk of the "Spirit of Islam, the 'Spirit' of Jainism. Islamic reform has generally concerned itself with the task of freeing the religion of Muhammad from the extraneousness that have clung to it through contact with Hinduism. The reforming activity has therefore concerned itself mainly with the removal of the taint of man worship, caste-system and idolatrous tendencies. In Gujarat these tendencies are seen in the orthodox hostility towards Pirana sectaries, the growing desire for knowledge of Urdu, and the anxiety to provide through its means religious instruction for Mussalman children. Jain reform has taken mainly the shape of a powerful literary movement in which it has been able to secure the co-operation of learned Jain *Munis* like V. J. Dharmasena and Nyaya Vijayaji. Kavi Rajchandra Rajvibhau of Kathiawad was the first modern reformer to wake up his community to the need of serious reform. As result, the last ten years have seen much literary and propagandist activity. The chief methods employed are sectarian conferences, institutions for training of *Sadhus* and priests, hostels for students, newspapers in the vernaculars and in English, the publication of literature and particularly of ancient sacred texts, the establishment of associations like the Bharat Jain Mahamandal with headquarters at Lucknow and the International Jain Literature Society and the Mahavir Brotherhood in London to engage the sympathy and collaboration of European *ascetics* and lastly religious reform evidenced in the desire to cleanse temple management of the evils that have crept into it, and also to return to the pristine form of Jainism. Through the Byadmahavirayal and Yasovijaya Jain pathshala both at Benares, they have tried to establish a Jain Al-gazh. The Central Jain Publishing House at Arrah (established ten years ago) and the Jain Mitra Mandal at Delhi are the chief literary agencies. The religious reform is primarily aimed to free Jainism from the incubus of Hindu doctrines such as *Sanhara's* *moheka*. It also aims at the destruction of the power of ignorant *Sadhus*. The consecration of the Jain temple at Simla in 1919 was a remarkable triumph for the reformers. The unprecedented success of this occasion was due to the absence of *sadhus* and professional *pundits*.

(d) *Credal Unity* — One of the most important consequences of these new stirrings is the desire, more prominently expressed in Hinduism, than in the other religions, for a credal unity or at least for harmony between the sects. In its fight with the clear-cut, positive theisms of Christianity, Islam and the Arya Samaj orthodox Hinduism finds its weakest point in its vagueness and lack of definition. As a result, it is slowly but surely giving way. Thinking

↑ *Indo-Iranian Review* March 1920, p. 101.

↑ I am much indebted for this section to Prof. A. C. Waddipati for letting me take notes from his forthcoming book, *Religions and their Western Tendencies*.

↑ The Imperial T. No. VI for all India now valuable proves that Brahminic Hinduism is declining, while Islam, Christianity and the Arya Samaj have increased largely at the expense of their disorganised and ancient priestly ritual.

Hindus have realised the truth of this statement. The establishment of the Bhārat Dharmā Mahāmandal as a central organisation in defence of orthodox Hinduism in 1902 was a bold step to "gather together the whole of the Hindu people in a single organisation, partly in self-defence, partly for further instruction in religion".* The publication of two excellent text-books—one advanced and the other elementary—on Hindu religion and ethics by the Board of Trustees of the Benares Central Hindu College in 1916 registered a considerable advance towards the formulation of an unsectarian Hinduism on the basis of which religious instruction could be given to all Hindus. These books have been translated into Gujarati and have attracted much attention. In regard to the sect divisions and conflict of doctrines much has been done in the direction of harmonising. Two problems confront Hinduism—the problem of reconciling the three ways of attaining salvation—*Jnana*, *Bhakti* and *Karma*—over which sects have wrangled for centuries, and secondly the problem of co-ordinating an intimate personal theism, which is the religion of the common man, with the intellectualist monistic position. With regard to the latter question as Pandit Sitanath Tattwabhusan, one of the greatest living Vedantists, says, "Rational religion seems possible only on the acceptance of the doctrine of unity in difference. Dualism by separating the subject and object of worship makes communion impossible. Monism, by denying their distinction, makes worship unmeaning. Not only *bhakti* and *seva*, but even *jnana* is impossible under the monistic theory for knowledge also is based on the distinction of the knower and the known." A great deal of the religious thought of the decade has been devoted to these problems. Two remarkable books—the *Gita Rahasya* of the late Bāl Gangādhār Tilak and the *Gītānyāsi* of Rabindranāth Tagore—both of which in Gujarati translations have influenced Gujarati thought profoundly—are contributions towards this synthesis. Liberal Hinduism seems also to have come into a closer understanding. A Theistic Conference held generally every year in connection with the Indian Congress brings together Brahmo and other theistic workers. Enlightened Aryas also recognise the need for common organisation with other reforming sects. On points of difference with the Brahmos, they seem at present to emphasise that Dayanand's insistence on the authority of the Vedas was based also on that other doctrine that although they were repositories of true and eternal knowledge, the interpretations of them (including Dayanand's own) were not authoritative nor binding†. In regard to such practices as *homa*, the Aryas insist that they are merely of hygienic significance. It will be remembered that Keshavchandra Sen in his Nababidhan section of the Brahmo-Samaj also introduced the symbolising of *homa*—the waving of lights (*arati*), *bhajan kīrtan* and other Vaishnavic details into the Brahmo worship.

(c) *Demand for an educated priesthood*—One last point has to be mentioned before this chapter is concluded. Along with the growth of religious patriotism there has also developed the desire for religious instruction and an educated priesthood. In para 171, we have seen in the religious organisation of the City how the Jains and the Muslims are more alive than the Hindus in the matter of religious instruction of their young. With the latter the cry for religious instruction is little more than mere moral text-books. Unless the Hindus are agreed on what minimum basis the religious instruction can be given nothing further can be done. In this respect the Arya Samaj must be given the credit for showing the lead. Their *gurukul* system of education with the intimate personal influence of their teachers on the taught is an admirable adjunct to their religious propaganda. As to religious ministrations, with the progress of education it is obvious that the educated classes among the non-Brahmans have begun to resent the usurpation by one class and that not the most deserving of priestly privileges. In certain parts of India, notably in Mahārāshtra a movement has been initiated from among these classes to do without the Brahman in religious ceremonies. In Madras the relations between the Brahman and the non-Brahman have now become so embittered as to attain the dimensions of a social problem of the first magnitude. In Gujarat we hear only faint echoes of this controversy partly because the average Gujarati Hindu does not bother much about the kind of person for his religious ministrations, and partly also on account of the fact that here the social habits of the two sections—Brahman and non-Brahman or at least the dominant classes amongst the latter—do not show so sharp a cleavage as in the Deccan or South India. But still the cry for a trained priesthood is real and finds much utterance in educated circles in Gujarat. In pursuance to this desire, this State always to the fore in social legislation, has responded by enacting the Hindu Purohit Act. The Bill was first published for public criticism in 1913, and after two revisions in the light of public opinion was finally passed into law on the 30th December 1915. The Act evoked a storm of opposition amongst the Brahmans, for one of its most important provisions was that any Hindu irrespective of his caste could become a qualified Hindu *purohit*. Amongst the non-Brahman Gujaratis, the Act did not also evoke much enthusiasm at first, but it is now being gradually appreciated. Its many safeguards as shewn below prove that although bold it is a very statesmanlike piece of legislation. In a Hindu State where the rulers and the ruled are of one religion the question of government interference in the people's religious

* Vide p. 316. Farquhar's Modern Religious Movements in India.

† In this attitude they deny that belief in the Vedas is merely Book Revelation. The interpretation being progressive the Vedas come to be regarded not a book written at any one time but a collection of ideas.

affairs can be discussed " from a platform to which there can be no parallel in British India. The Act is so important that I feel no hesitation in giving the following extract from the State Administration Report of 1916-16, which explains its main provisions —

As the preamble states, the object of this Act is to have properly qualified Purohita for the performance of religious rites and able to expound their true significance, so that the Yajamanas may feel satisfied that their spiritual interests are safeguarded. In order to carry out this object, the Act provides for the grant of letters of authority to act as duly qualified Purohita to persons who may have passed the Hindu Purohita's examination, who may have passed in Yajnik subjects or in any standard of the Dharmashastra of the Shrivani Mā Dakshin examination, or who may be specially considered fit by Government. Any Purohit, not so authorized, officiating at any religious rite as defined in the Act, is liable to be prosecuted and tried before a Magistrate specially empowered by Government, and sentenced to a fine not exceeding twenty five rupees. Several important exceptions have been provided for in order to facilitate the working of the Act. The first exception is in favour of unqualified Purohita over twelve years of age at the date of the commencement of the Act. The second allows unqualified Purohita who are not residents of the State and who may be accompanying outsiders, to officiate for them provided that their stay does not exceed one month. The third permits an unqualified Purohit to officiate in a place where no qualified Purohit, who can by custom officiate for a particular community is available in the locality or within a certain radius, or where owing to the simultaneous performance of a number of ceremonies there is not a sufficient number of qualified Purohita. The fourth relates to the performance of funeral obsequies or any other religious rite that may be specially excepted by Government. The last is in favour of a person who for any special reason may be specially exempted from the provisions of this Act by Government. The period allowed by the Act to persons who are desirous of carrying on the profession of the Purohit, for qualifying themselves, is 6 years from the date of its publication. This provision is expected to give sufficient time to the younger generation to acquire the necessary qualifications. Another important feature of the Act is that any Hindu may qualify himself as a Purohit irrespective of his caste. But it does not follow that Yajamanas will have to employ Purohita of any other caste than the one which ordinarily provides Purohita to them. The Act ends with an important safeguard that the legality of any ceremony will not be affected because of its having been performed by an unauthorized Purohit. The Act will apply only to that part of the State to which Government may declare it to apply by notification in the Adhya Patrika or to a particular community. The result of this measure will be watched with interest.

APPENDIX IV

Account of the Terapanthi Sect of Svetambar Jains from a note supplied by Seth Kesree Chand Keshory of Calcutta, who is the Secretary of the Terapanthi Sabha and has given considerable assistance in the course of the census operations

The founder of the Terapanthi sect of Svetambar Jains was one Bhikanji who was born on Ashar Sudi 18 of Sambat 1783 (about June 1726 A D) in the village of Kantaha in the Marwar State of Rajputana. His father's name was Baluji Shukhlecha, an Oswal by caste, and his mother's name Dipa Bai. For some years, owing to instability of Government, persecution and the difficulties of life, the Jain community had been going through a period of depression and deterioration and various reformers had attempted to restore the ancient and orthodox faith. Bhikanji was an intelligent and thoughtful boy and on the death of his wife he was persuaded to take holy orders by Raghunathji, an Acharya of the Dhundhiya sect of Svetambar Jains, which had been founded one hundred years previously by one Labji Bhukanji and was initiated in Sambat 1808 (A D 1751) by Raghunath. But in the course of time he found it necessary to break away from the doctrines of his Guru and in Sambat 1817 (1760 A D) he definitely separated and reinitiated himself. He took the five great vows of a Sadhu and made up his mind to follow those vows himself and cause others to follow them in deed, thought and speech.

There were thirteen Sadhus when he first began his new career of promulgating and preaching the true religion, and on this account people called the sect founded by Bhikanji Swami the "Terapanthi sect". Swami Bhikanji on hearing of this epithet, accepted it but put a different meaning on it, viz, a sect of Sadhus who were to follow thirteen vows or rules of conduct (Tera=13) or a sect of the Lord (Tera=Thine). The main principles of this sect which distinguish it from the other sects of the Svetambar Jains are —

- (1) Terapanthus do not worship idols or images nor consider such worship as leading to salvation
- (2) They reverence only those who lead ascetic lives, absolutely refrain from hurting any sentient being and own no property
- (3) They lay special stress on the necessity of refraining from hurting any sentient being and they distinguish between worldly benefits which pertain to the transitory things of this life and spiritual benefits which consist in following and leading others to follow the true way of life

The Terapanthi Sadhus preach and instruct people for their spiritual benefit only, having given up the world they have nothing to do with any worldly advantage. The following are some of the rules of conduct which a Terapanthi Sadhu follows at the present time and which are strictly in accordance with the commandments of Lord Mahavira as contained in the Sutras—

- (1) Terapanthi Sadhus do not take help from any lay-man in their work
- (2) They beg their food, water and clothing from lay-men but will not take anything which a lay-man prepares or is even suspected to have prepared specially for a Sadhu
- (3) They do not eat or drink after sun-set nor before sun-rise and do not keep with them articles of food or drink during the night
- (4) They do not travel in any conveyance nor allow their books, etc, to be carried by any one but a Sadhu
- (5) They may stay in one place for one month only or, during the rainy season, for four months, except in the case of physical inability to travel. After one month or one rainy season of four months they may not return to that place for the next two months or two seasons respectively. They carry all their books and articles with them and do not leave anything behind with any lay-man
- (6) They do not keep any metal articles, they keep only three wooden receptacles for their food and water. They wear white clothes and each Sadhu is not allowed the use of more than about 26 yards of cloth. They do not use costly cloth and may not take it even if offered. They do not shave or cut their hair with any metal instrument, such as scissors or razors but twice every year they are to pluck off the hairs of their head and beards, they do not wear any shoes nor use an umbrella in the summer or a cloth to cover the head in the winter. They must sleep at night inside a covered place even in summer and keep the doors open even in winter. In case of serious illness necessitating an operation they do not take help from any physician and it is the Sadhus only who can operate in such

cases. They do not take medicine from any charitable dispensary or free institution. If medicine is required they must beg it from a private person only.

- (7) They have no *maths* or residential quarters dedicated to them but they may remain in the house of a lay-man with his permission.
- (8) They do not take part in the social, political or legal affairs of the world but pass their time in religious discourses.
- (9) All the Terapanthi Sadhus and Sadhvis follow the commandments of the *Acharya*. No one is initiated as a Sadhu without the written permission of his parents or guardians and the initiation as a public ceremony.
- (10) Any deviation from these and other rules of conduct enjoined in the *Sutras* is strictly scrutinised and any Sadhu who fails to keep up the standard loses his position as such.

Such are the teachings and rules which Jain Swetembab Terapanthi Sadhu has to follow.

Swami Bhikaji passed away on Bhadra Sudi 13 1860 Sambat (September 1803 A.D.). He had initiated 48 Sadhus and 56 Sadhvis. He was succeeded by Swami Bharimalji as Acharya who initiated 38 Sadhus and 44 Sadhvis. He breathed his last in Sambat 1878 (1823 A.D.). Swami Ratchandji was the next Acharya and during his time 77 Sadhus and 167 Sadhvis were initiated. He passed away in the Sambat year 1908 (1853 A.D.) at the age of 62. The next Acharya was Swami Jitmalji who was great scholar and translated into the vernacular many *sutras* including the Bhagwati. 105 Sadhus and 225 Sadhvis were initiated by him. At the ripe age of 78 he passed away at Jaipur on Bhadra Sudi 12 1838 (1881 A.D.). He was succeeded by Swami Maghrajji as Acharya who initiated 36 Sadhus and 81 Sadhvis. He left this world at the age of 53 on Chait Sudi 5 1918 (1863 A.D.) at Bardambur. Maneklalji Swami was the next Acharya. He died at the comparatively early age of 49 years on Kartik Sudi 3 1904 (1847 A.D.) at Sujangadh. Swami Dalchandji was unanimously elected Acharya after him. Swami Dalchandji initiated 37 Sadhus and 126 Sadhvis and passed away on Bhadra Sudi 13 1966 (1909 A.D.) at the age of 56 and was succeeded by the present Acharya Swami Kharanmaji who was born on Phalgun Sudi 2 1833 (1877 A.D.) and took his order in the year 1914 on Asoj Sudi (1888 A.D.) being initiated by Swami Maghrajji. He is a profound scholar of gentle and unostentatious habits and up till now has initiated 4 Sadhus and 106 Sadhvis. The present number of Sadhus under his control professing the Terapanthi faith is 100 and the Sadhvis number 243. The number of his lay men followers would be about two lacs and they are to be found in almost all the provinces of India especially in Rajputana, Bengal, Assam, the Punjab and the Bombay Presidency.

APPENDIX V.

Extract from Chapter IV of the Burma Census Report by Mr S G Grantham, I C S , on Buddhism in Burma

Since for the purposes of the census the religion of each person is the label which he claimed at his enumeration, the class tabulated as Buddhist is logically correctly described as such. But it would not follow that the people of this class are Buddhists according to the ordinary meaning of that term, and accordingly, having regard to the large part of the population concerned, it is desirable to give some consideration to the right of those people to claim that label. The opinion expressed by Mr Eales in the census report of 1891 was that there was really very little Buddhism amongst the Burmese, he was "struck with the very vague notion which the ordinary lay Burman has about the religion he professes," and in each subsequent census report there has been quoted his description of Burmese Buddhism as "a thin veneer of philosophy laid over the main structure of Shamanistic belief" or devil-worship. To this Mr Lewis added in the census report of 1901 "Let but the veneer be scratched, the crude animism that lurks below must out. To the end of time the Buddhism of the Burmese will never be anything more than a polish." These opinions were accepted also by Mr Morgan Webb in the census report of 1911, and they have hitherto passed unquestioned in official publications. But there is something more to be said.

It is interesting first to consider a curiously similar opinion, in which the similarity was implied even more than stated, in the reports on Christianity in England as it was revealed in the war of 1914-18. There are numerous passages in the literature of the time which give the same views, two written from different standpoints are quoted here —

"Before the war it may well be doubted if outside certain limited circles there was any real and deep knowledge of the sacred writings among the vast majority of our countrymen. Inquiries made from various quarters into the mind of the youth of our nation in the armies have revealed a startling ignorance as to religious truth, which makes it very difficult to believe that their minds have ever been brought into intelligent contact with the truths of revelation. None who have any real first hand knowledge of the mind of the younger generation will maintain that most of them have had anything but the dimmest knowledge of the deeper meaning of the literature of Revelation. It may well be questioned if this was not also true even of that fraction brought up within the churches"*.
"Europe is still considered in common parlance, as a Christian continent. It may be doubted, however, whether in any real or deep sense, European society, or any considerable proportion of European men and women in any one of the seventy generations which have elapsed since Christianity became the official religion of the Roman Empire, has ever accepted, or even endeavoured to understand and apply, the teaching and outlook of its Founder. There has indeed never been a generation without Christians, but their influence upon public affairs has been limited and intermittent. The ex-Church school scholars who fought in France were found by the chaplains to be as ignorant of the faith and as indifferent to their ministrations as their more reputedly Godless comrades. The war has often been described as proof of the impotence of the Christian churches. It would be truer to say that modern life as a whole is a demonstration that neither the world nor the churches have even attempted to be Christian"†.

These seem to put in a different light the "vague notion which the ordinary lay Burman has about the religion he professes," particularly when regard is had to the compactness of England, the wide extension there not only of literacy but of the practice of reading, and the activity of the various Christian churches. For my own part I have often been struck with the fullness of knowledge of quite slightly educated Burmans and even of some ordinary uneducated cultivators about their religion. Regard must be paid to variations in different localities. All over the well cultivated parts where the bulk of the people live there are numerous Buddhist monasteries and pagodas which keep their religion continuously before the eyes and in the minds of the people, the children go to school in the monastery, the monks preach and at least the older folk listen to them, the same older folk spend frequent days in meditation. The younger adults may seem to be careless and to give only a passing thought to their religion on special occasions, but they have in their hearts the firm intention of copying their elders when their own time comes, possibly some critics of Burmese Buddhism have known other countries in which other religions prevailed but the younger men behaved in the same way. As one goes out to the less populated parts one finds the influence of the monks in spreading a knowledge of Buddhism grows less. Monasteries are fewer and more widely scattered, people have less intercourse not only with monks but with each other, their minds have less development altogether, and with this there is less knowledge and realisation of Buddhism. These also are the people who in a superficial way see more of the working of physical nature, for which they are inexorably compelled to furnish some explanation, and if they devise or support explanations which seem to some to be not strictly in accord with their religion, they are not the only people who have done so. They represent a stage through which the more advanced part of the people have passed, but they are not typical of the population and they are on their way to the stage which the

* Dr Cairns. *The Reasonableness of the Christian Faith*, 1918.

† A. F. Zimmern. *Europe in Convalescence* 1922.

typical part has reached. Of some of these it may be said with some truth that animism is their religion and Buddhism a veneer but there is not the same truth in applying that to the typical Burmese villager. Not that he is free from all that is not Buddhist. An advanced religion when first given to a people never finds in their minds a clean slate to write upon. The heritage of many generations is not completely blotted out even in its leaders by an intellectual ascent to new ideas and the masses of the people only follow far behind their leaders, combining little and a little more of the new religion with the old. Thus no advanced religion is quite the same as it is expounded by its teachers and as it is regarded by the masses of their followers and the existence of many non-Buddhist beliefs and practices amongst the Burmese Buddhists would not be a denial of their claim to be Buddhists.

What moreover is Buddhism? Gautama's doctrines were the outcome of a development of thought amongst Hindus which began long before his day and Buddhism as he taught it involved many ideas which had come down from earlier stages of culture. His teaching was naturally directed to his new and specific doctrines, and the current culture of the time was a background which his teaching generally took for granted except in so far as he proposed to change it. After Gautama's day and especially after the great promulgation of his religion by Asoka, there was in India a continual decline from his standpoint and a continual approximation of the Buddhist views to those of the other philosophies and religions of India. The belief in a soul was revived and gradually gained the upper hand, and presently the popular gods and superstitions were once more favoured by Buddhists themselves. Buddhism at last faded away and gave place to a re-instatement of the old popular Hindu pantheon transformed and enlarged. It may be said that Asoka's mission came to Burma before this decline took place. But although so much mystery conceals the true account of the origin of Buddhism in Burma, it is certain that Burma was not converted in a day or in a year and even if the origin of Burmese Buddhism is assigned to Asoka's mission, it is clear that a stream of other teachers must have come and that their views would be coloured by the changes going on in India. In any case Buddhism, even in its heyday in India, included much of the old religion and culture which had preceded it and this must be true of the Buddhism which was brought to Burma and there came into contact with the previous culture of the Burmese and Talings, or their forebears. Thus Thakya Mia, the King of the Nats or spirits, whatever he may have been before, became the Burmese interpretation of the old Hindu god Indra and his *nats* are the beings that inhabit his sphere. There has been confusion of thought between the *nats* who are the *devas* of the six abodes (in Burmese, *sat-pyi charuk tap*) and the local animistic *nats*, and often a Burman speaking of the former is wrongly supposed to be speaking of the latter or is himself confusing the two. Originally no doubt the *nats* were the spirits of the primitive pre-Buddhist religion, and there are still *nats* everywhere in every village, forest or field. But generally the Burmese attitude to the *nats*, although it was not learned from him, is that of Confucius, who gave the advice 'Pay all respect to spiritual beings, but keep them at a distance.' The Burmese Buddhist in the ordinary populated parts of the province makes offerings to the *nats* because that is the way of defending himself against them: this is not a contradiction of his Buddhism, but, like the fence he builds around a lonely new settlement in the jungle to keep out tigers at night, it is to ensure continuance of the life and conditions in which Buddhism may be practised. Even the so-called *nat* worship has been modified by Buddhism and it is difficult to accept the description of it as Shamanism with all the connotations of frenzy and priestcraft which go with that name. There are no priests of the *nat* worship: the *nats* are simply essential facts of the universe of which each person must take account just as he does of gravity, friction, inertia and fire. There are still a few of festivals held, such as that at Taunggyon near Mandalay where certain women dance after *nats* have taken possession of them: but these are about as representative of Burmese thought as Jack-in-the-Green is of English. Much of the *nat*-culture is on the same footing as the fairy tales in the folklore of Europe: the rest is simply Burmese science.

Actually the Burman thinks and speaks as a rule of his whole national culture as Buddhism. Instead of postulating the Mahayana and Hinayana schools of Buddhism and rejecting as non-Buddhist all that will not fit those moulds, we should rather define Buddhism in Burma as the religion of the Burman with its modifications amongst the Shans and other indigenous races. In recent years the opinion has grown, particularly through study of inscriptions and frescoes in Pagan, that the Mahayanist influence upon Burmese Buddhism, though less than the Hinayanist, has been considerably greater than was formerly supposed. Burmese Buddhism, however, is not simply the result of a clash between the Mahayana and Hinayana schools, with each of them came a whole culture which was partially absorbed by the Burmese and Talings and combined with their own native cultures and modified by their outlooks and there have since been centuries of development in which, although fresh inspiration has frequently been sought from India and particularly from Ceylon, the national mind has still selected and sifted and interpreted all that has been received. Thus Burmese Buddhism is a national product which cannot be adequately described in terms invented to describe Buddhism in India, Tibet and Ceylon. But its essential doctrines are those propounded by Gautama, e.g. the Four Noble Truths, the Eightfold Middle Path, the Law of Causation, the Doctrine of Non-self (*Anattā*) and Nirvana and its claim to be regarded as Buddhism cannot therefore be denied.

APPENDIX VI

Female Infanticide

Female Infanticide has been dealt with at some length in previous census reports and notes on the practice will be found on pages 243 to 260 of the Punjab Census Report of 1911 and on pages 215 to 217 of the India Report of that census. I do not propose to treat the subject in any detail but merely to give certain relevant figures and to preface them with a few general suggestions as to the way in which they should in my opinion be approached. We are apt to deal with the subject in an attitude of mind which is peculiar to our particular form of culture and civilization and is entirely inapplicable to the actual conditions, and this attitude of mind leads us, in our attempt to explain figures which indicate a suspicious shortage of female children in any community, to look for any other possible cause than to a practice which seems to us cruel, barbarous and repulsive.

2 What are the facts apart from this sentiment? Infanticide is a custom which has been common among almost every nation and people in the world's history, except those who have been brought under the influence of Christian or Muhammadan culture*. It is prevalent among practically all primitive races as a means of limiting the family, but the practice is by no means confined to barbarous races nor is it a sign of a backward state of culture. It was common among the historic races and the advanced civilizations of the past. There is reason to believe that it was prevalent among the Egyptians at the time of Moses and that the Jews themselves practised it. It was certainly common among the surrounding nations, the Phœnicians, Aramaeans, Syrians, Babylonians and Carthaginians. It was an acknowledged practice among the Greeks at the height of their civilization, the head of the family deciding whether a child born was to live or die. "It was enjoined by the ideal legislation of Plato and Aristotle and by the actual legislation of Lycurgus and Solon." It was general in the earlier times of Roman history and was later allowed subject to definite legal restrictions. Pliny speaks of it as necessary, Seneca saw nothing wrong in it and Suetonius alludes to the practice. It was prevalent among the Arabs till Muhammad forbade it. But it is doubtful how far the precepts of the Prophet (who himself condoned abortion) were followed. They are certainly *not* followed by some of the nomadic races, and we know that the infant daughter of a cultured and well educated Persian family, who was afterwards Nur Mahal, Jehangir's queen, was exposed soon after her birth and rescued from death only by a lucky chance. The practice is common throughout China at the present day. It is in fact a practice which excites no feeling of repulsion or aversion among non-Muhammadan and non-Christian peoples and is, on the other hand, deemed to be a necessary and natural means, along with abortion, of restricting the family within economic limits. However strongly may be held the sentiment against the taking of life when life has fairly started, it does not seem to apply to the arresting of the incipient life of a new-born infant, just as we drown without hesitation surplus puppies when we should hesitate to dispose of full-grown dogs in the same way.

3 With the consciousness in our mind of this attitude towards the practice among the non-Christian peoples let us now consider the case of India. Infanticide was probably at one time common over a large part of India. It was certainly common in recent times in Central India, Rajputana, Gujarat, Oudh and among certain primitive tribes such as the Khonds of Madras, the Nagas of Assam and was specially practised in Northern India among the Sikhs, Jats, Khatrijs, Rajputs and Gujars. An account of the special legislation which was instituted to deal with the practice among these people is given in the pages already cited in the Punjab Report. We have to remember (a) the fact that among these groups of people the custom is an ancient and recognized tradition and that the Indian is notoriously conservative of his traditions, (b) the ease with which, under the conditions of childbirth in an Indian family, the practice can be carried out without the possibility of any definite suspicion in any individual case such as would justify official interference, and (c) the fact that the registers of births are not kept by caste and that the suppression of female births is a well-known fact in parts of the Punjab†. The Table below shows the number of females per 1,000 males in certain castes which have the tradition of female infanticide and, for comparison, in others of the same region which have *not* got this tradition. The latter castes in this Table have been selected to show different representative strata of people. Many other castes will be found tabulated in Table IV of Chapter VI of the Provincial Reports and it will be seen that there is no question of selecting those in which the sex-ratio is particularly high.

* The subject is discussed in detail by Carr Saunders in his book "*The Population Problem*," from which I have borrowed a good deal of the information set out in this paragraph.

† Actually observed by Mr Jacob when he was Deputy Commissioner of the Jullundur District (vide page 227 of the *Punjab Census Report of 1921*).

I leave the figures to speak for themselves without further comment except that (1) in these particular communities it seems to be quite useless and quite unnecessary to insist upon reasons for the low sex ratio other than that which these figures suggest viz., the continued deliberate destruction of female infant life either by active or by passive means, and (2) the existence of a practice of this sort in certain large sections of the people must be generally known and must necessarily influence the sentiments of others towards the value and sacredness of infant life. We should expect therefore, and we actually find that the sex ratio is generally low in tracts where infanticide may be presumed among certain sections.

Table showing figures of sex-ratio A of groups in which there is a tradition of female infanticide and B in which there is no such tradition

Groups		NUMBER OF FEMALES IN 1,000 MALES					
		1881.		1911		1901.	
		All ages.	0-5.	All ages.	0-5.	All ages.	0-5.
PUNJAB.							
(A)	Jat (Hindu)	760	923	774	904	793	839
	Khatris	811	1,041	802	1,028	808	914
	Rajput (Hindu)	796	996	796	836	823	903
	Orامر	778	903	793	883	798	898
(B)	Jat (Muslim)	830	942	807	936	836	940
	Rajput (Muslim)	864	937	841	978	897	961
	Brakman	821	977	811	982	841	
	Chaman	813	976	846	964	871	
	Kanwer	936	1,009	947	1,077	924	
	Aram	840	915	807	862	877	
UNPUNJAB PROVINCES.							
(A)	Jat (Hindu)	755	946	789	877	833	
	Rajput (Hindu)	77	80	673	646	867	
	Jat	783	879	773	844	802	
(B)	Brakman	913	947	86	960	923	
	Chamrar	960	1,000	958	1,026	966	
	Kanwer	931	1,048	911	1,070	931	
	Karnal	960	1,061	920	966	976	
RAJPUTANA.							
(A)	Rajput (Hindu)	77	803	778	83	786	859
	Jat	890	960	831	953	879	1,278
	Gojar	877	966	816	944	834	1,404
(B)	Brakman	930	1,037	937	1,018	923	1,078
	Dholra	812	871	862	1,009	918	1,228
	Tib	911	1,067	930	1,008	904	
	Lodha	803	927	816	867	911	

Not available

APPENDIX VII

The size and sex constitution of the average family and the fertility of marriage life

1 In connection with the Census of 1911 I attempted to obtain some statistics in the Central Provinces bearing on the size and sex constitution of the average family and the fertility of marriage life. By means of an enquiry made through an intelligent agency on a special questionnaire I obtained some returns which constituted, subject to certain defects, a fairly satisfactory random sample. These returns were tabulated in the census office and the results were recorded in a note appended to Chapter VI of the Central Provinces Report of that census. On the present occasion I suggested that enquiries of a similar nature might be taken up in provinces where it seemed possible to obtain through a competent agency sufficiently trustworthy material. Investigation on these lines was made in the following provinces, Bengal, Bihar and Orissa, the Central Provinces, and the Punjab and in the Baroda and Travancore States, and the results, which are of considerable interest, are recorded in detail as appendices to the Provincial Reports. It will only be possible to take note here of the main conclusions reached, and the student is referred to the account of the individual enquiries for further details.

2 It will be readily understood that in the special conditions of Indian social and family life such enquiries are not conducted without considerable difficulty. The habitual reticence of the Indian regarding the female portion of his household, even where he does not entirely seclude them, makes any investigation into the more intimate aspects of family life full of obstacles. The return required in the English questionnaire from married women regarding the number of children borne by them would in a general population schedule be impossible in India, and even in these limited samples it has usually only been possible to obtain the information through the husband or father of the family. The actual method adopted varied in different Provinces. In Baroda and Travancore States the information was obtained by a special staff direct from the women themselves. In the other Provinces various devices were used for ensuring that the family was that of a single married couple and for calculating the duration of married life. For the former condition clear instructions were issued that the return was only to be filled up in the case of married couples both of whom were married once only and were still alive. The calculation of the duration of marriage offers considerable difficulty. Where knowledge of age and of the passage of years is so vague it is hopeless to expect to obtain any direct information on such a point. It can be assumed for all practical purposes that every woman is in the married state at or immediately after puberty and that cohabitation, therefore, begins in every case with puberty. If therefore her present age is recorded by enquiry or guess a rough inference can be made as to the duration of her effective married life with her husband. For the assumption of completed reproductive life a definite age has to be taken, say 40 to 45, or according to the method adopted in Bengal it was assumed that where the youngest child was five years or over the family was complete.

3 In Bengal the investigation was made by intelligent persons who were interested in the subject and the number of returns tabulated were 34,686, the schedules relating chiefly to the middle class section of the population. Usually the family has between five and six children born, the intermediate fraction being rather higher in the case of Muhammadans than with Hindus, the ratio of still-born children was 8.3 per 1,000 for boys and 7.1 for girls per 1,000 which is about twice the proportion in England. It was found that a larger proportion of children died under the age of five years in families where the marriage was of long duration and that more girls died than boys.

4 In Bihar and Orissa the enquiry was made exclusively by medical officers and 12,593 slips were tabulated. In the families investigated it was found that the most usual number was five children born, that there were always more boys than girls, especially in one child families and that 37.3 per cent of those born had died, the female death rate having risen during the last ten years. In these families 114 male children were born per 100 females and in the case of the first-born the proportion was 131 males.

5 In the Central Provinces enquiry 157,181 slips were obtained. The average number of children born varied between 6 and 7, but about 40 per cent of the children who were born had died. The statistics indicated that the beginning of married life by males before they had reached full maturity was likely to result in small families but otherwise the age of the husband has very little effect on the number of children.

6 In the Punjab data were obtained for 166,419 families. They were divided into the following professional groups, clerics, agriculturists, traders, artisans, menials and criminals. While the proportion of female to male births is about 9 to 10, the proportion of females to males among first-born children is only 8 to 10. In the majority of marriages the first child is born in the third year of effective marriage and there is an indication that the first child, when

It is born in the early and late years of marriage, is more likely to be boy than in the middle (5-10) years of married life. The most fertile households are those in which the woman is between 15 and 30 years old on marriage. For completed marriages (of 30 years duration) the number of sterile cases is low (6 per cent.) the highest number (7.7 per cent.) being found among manials and the lowest (4.7 per cent.) among traders. The most usual size of the family in completed marriages is from 3 to 5 children, except among "clerics for whom a family of 3 is more common than any other. Artisans have the highest gross fertility (6.9) and clerics the lowest fertility both gross (5.3) and net (3.7) (i.e. deducting children who died). During the first few years of married life one child is born roughly in every three years. The rate of child bearing diminishes with duration of marriage and practically vanishes, for ordinary Panjab conditions, after thirty-six years of married life. Cousin marriages are very common (especially at first marriage) among Mussalmans.

7 In Baroda, the enquiry was specially carefully conducted through an intelligent class of both men and women and 131,235 slips were tabulated, 1 per cent. of which were for completed marriages and the rest for continuing marriages. The normal household averages in the State at 4.1 persons. The size of the complete family most favoured five children. General labourers (5.8) and traders (5.5) had a higher average while cultivators of all kinds (5.2) and field labourers (4.8) a lower average than the mean of the State (5.3). The size of family in different social divisions varies from 6.1 in the case of the forest tribes to 4.9 among the Kolis. The number of females born is always less than the number of males born, the ratio varying from a high masculinity of first births (1,392 males per 1,000 females) to a lower average proportion of 1,099 male births per 1,000 female births in subsequent births. The ratio of masculinity (1,522 males per 1,000 females) in one child families is even higher than that of first births in multiple families. The vast majority of effective unions in the State take place when the girl is 13 or even younger and it was found that, where the marriage is postponed from the thirteenth year by about four years, not only does the rate of fertility rise by about one child in three families, but the size of the married family also increases from 3.1 to 3.3.

8. In Travancore 37,641 returns were obtained through the conservancy staff. The size of the family (where the wife has completed twenty years of married life) among Brahmans to whom marriage is compulsory was five children among non-Brahmans and Muham. madans between five and six and among Christians 6.3. The proportion of males among first-born per 1,000 females was 1,205 and among those who came under skilled midwifery 1,253. The figures show some presumption in favour of female children as the family gets larger and the age of the parents increases.

9 The conclusions which are most strongly suggested by this enquiry are the following:

- (1) The rate of masculinity is higher for the first born than for subsequent children.
- (2) The usual number of children born is from five to seven—the number being higher in the south than the north and in the lower classes than the higher classes.
- (3) Between $\frac{1}{3}$ rd and $\frac{1}{2}$ ths of the children born die.

APPENDIX VIII

Some articles and paragraphs in the Provincial Reports dealing with special subjects

[The references throughout are to the Provincial Reports]

Ajmer-Merwara and Rajputana

Season of gestation and sex at birth	page 142 para 16
Correlation of rainfall with blindness	„ 208 15

Andamans and Nicobars

Jarawa raids and expeditions	Appendices H, I and J
Customs of the Nicobarese	Appendix L
Festivals on Car Nicobar	Appendices K & M
Nicobarese Folk lore	„ N & O
Religious ceremonies	„ P & Q

Assam

Trade in the local markets	pages 167-170 para 166																				
Family Budgets	page 180 para 177 & Appx F																				
The connection of different Naga and other tribes in Assam, their origins and certain customs	Appendix C																				
The disposal of the dead among Naga tribes and others	„ D																				
Some cottage industries	„ F																				
Discussion of Census Statistics of Tea garden population	<table style="display: inline-table; vertical-align: middle;"> <tr> <td style="font-size: 3em; vertical-align: middle;">{</td> <td> <table> <tr> <td>page 5</td><td>para 14</td></tr> <tr> <td>37</td><td>56</td></tr> <tr> <td>39</td><td>57</td></tr> <tr> <td>57</td><td>73</td></tr> <tr> <td>84</td><td>94</td></tr> <tr> <td>108</td><td>110</td></tr> <tr> <td>121</td><td>122</td></tr> <tr> <td>150</td><td>141</td></tr> <tr> <td>162</td><td>152</td></tr> </table> </td> </tr> </table>	{	<table> <tr> <td>page 5</td><td>para 14</td></tr> <tr> <td>37</td><td>56</td></tr> <tr> <td>39</td><td>57</td></tr> <tr> <td>57</td><td>73</td></tr> <tr> <td>84</td><td>94</td></tr> <tr> <td>108</td><td>110</td></tr> <tr> <td>121</td><td>122</td></tr> <tr> <td>150</td><td>141</td></tr> <tr> <td>162</td><td>152</td></tr> </table>	page 5	para 14	37	56	39	57	57	73	84	94	108	110	121	122	150	141	162	152
{	<table> <tr> <td>page 5</td><td>para 14</td></tr> <tr> <td>37</td><td>56</td></tr> <tr> <td>39</td><td>57</td></tr> <tr> <td>57</td><td>73</td></tr> <tr> <td>84</td><td>94</td></tr> <tr> <td>108</td><td>110</td></tr> <tr> <td>121</td><td>122</td></tr> <tr> <td>150</td><td>141</td></tr> <tr> <td>162</td><td>152</td></tr> </table>	page 5	para 14	37	56	39	57	57	73	84	94	108	110	121	122	150	141	162	152		
page 5	para 14																				
37	56																				
39	57																				
57	73																				
84	94																				
108	110																				
121	122																				
150	141																				
162	152																				

Baluchistan.

Notes on the progress of education in Baluchistan 1911-21	pages 79—81
Notes on Afghan Pawindahs	101—106
Economic conditions—Agricultural and Pastoral	„ 128—133

Bengal

A note on the manner of presentation of birth and mortality rates	pages 213—219
An enquiry regarding the fertility of marriages in Bengal	220—231
A note on the tests of the accuracy of vital statistics, which have been carried out of recent years by the Department of Public Health in Bengal	232—233
Account of an abortive attempt to test the extent of lapse from literacy	„ 300—301

Bihar and Orissa

Note on the Vital Statistics—Experiment in Muzaffarpur District	page 71
Note on an economic census of Patna bazaar	„ 95
Size and sex constitution of families	„ 174

Bombay

Vital Statistics of Criminal tribes in Settlements	Appendix A
Glossary of obscure language names	„ B;
Claims to new caste nomenclature	„ C
Sind Ethnography	„ D
Published books	„ H
Divorce	„ K
Effect of irrigation on population	„ L
Cost of ceremonies	„ S
The inter relation between the various causes of deaths	„ U
Analysis of families	„ V
Family Budgets	„ W
Inverse correlation between prices and births over a wide area	„ X

Burma.

Food supply and the growth of population	page 36	para. 34.
Decline of births among Buddhists	41	37
Economics, social and political aspects of the age distribution	136	86.
The Zerbadis	213	152.
Indigenous languages and races	pages 253—256	Appx. B.
Notes on the Occupations of the Mandalay District	290—319	C.

Central Provinces and Berar

Statistics of overcrowing in towns	pages 40—41.
------------------------------------	--------------

Madras

Industrial occupations	pages 163—202.
------------------------	----------------

N W F Province.

The Ethnographic glossary of castes and tribes	pages 241—265.
--	----------------

Punjab

Albemur	page 330	para. 207
Conditions of labour and cottage industries	pages 369—370,	Section VI.
The error in Vital Statistics as determined from census examinations, on probable hypotheses as to the errors of the census	Appendix I.	
Mean scalar distance	III.	
Chances of survival for children born in various years of married life	V	

United Provinces

On the Masonic Societies and Christian Churches of the United Provinces	Appendix B.
The depressed classes of the Kumaon Hills	C.
Note on the markets of Meerut town in the Jhansi District	D
Overcrowing in large Cities	E.

Baroda State

Annual Report	pages 174—182.
Centre of population	Appendix I.
A method to test the accuracy of birth-registration	II.
A note on Shreyas Radhaka Adhikaryanga	III.
A census of livestock	IV

Hyderabad State.

Caste glossary	pages 237—253.
Special castes	291—296.

Kashmir State.

Note on castes in Kashmir	pages 154—156.
---------------------------	----------------

Travancore State.

Special enquiry into the size and sex conditions of families in Travancore	pages 64—67
San-factory or cottage industries	147—160.
C title Census	161—162.
Labour Census	154—167
Internal trade and markets	page 158.
The economic condition of the people	pages 160—161.

INDEX

(The references throughout are to paragraphs)

Subject.	Chapter	Para.	Subject	Chapter	Para.
A					
Account of the Terapanthi sect of Svetambar Jains	App	IV	Bombay Presidency	I	19
Actuarial examination of the age statistics	V	103	Bombay Presidency, languages of the—	IX	163
Administration, Public and Liberal arts	XII	234	Brahmo	IV	97
Adults, proportion of — to children	V	103	British Territory and Indian States — migration between	III	76
Afghanistan, immigrants from	III	78	Buddhism	IV	91
Age, blindness by	X	179	Buddhism in Burma	App	V
Age categories, Sundburg's	V	112	Building industries	XII	230
Age, comparison of leprosy by sex and —	X	183	Burma	I	20
Age, concentration on certain members	V	101, 102	Burma, immigrant population of	III	72
Age, deaf mutism by	X	176	Burma, race in—	XI	199
Age distribution by religion and caste	V	110	Burma, towns	II	60
Age distribution, variation in —	V	104, 105			
Age, insanity by	X	172			
Age, Mean	V	111			
Age of Mothers, average, and proportion of effective marriage	VII	137	C		
Age statistics, actuarial examination of—	I	103	Calcutta	II	54
Ages, sex ratio by different —	VI	110	Caste, age distribution by —	V	110
Agriculture	XII	208	Caste, blindness by —	X	180
		to 211	Caste, Brahmans and Non Brahman —	XI	195
Agricultural labour	XII	212	Caste, deaf mutism by —	X	177
Anglo Indians, Europeans, etc —	XI	200	Caste, difficulties of the return of —	XI	190
Arabia, immigrants from	III	78	Caste, insanity by —	X	173
Area and population of the whole Empire	I	4	Caste leprosy by —	X	184
Arts, Liberal and public administration	XII	234	Caste literacy by —	VIII	145
Arya Samaj	IV	96	Caste, modern tendencies	XI	201
Asia, immigrants from outside —	III	79	Caste, reasons for the return of —	XI	189
Asiatic countries, immigrants to India from other —	III	78	Census by occupation method of —	XII	202
Assam	I	15	Census of Handlooms —	XII	243
Assam, immigration to	III	67	Census the industrial —	XII	204
Assam, urban population of	II	45	Central India (<i>Agency</i>)	I	27
Asylums, lunatic	X	174	Central India, towns	II	47
Attitude of the Public and the influence of Non Co operation	App	I	Central Provinces and Berar	I	21
			Central Provinces and Berar, emigration from and immigration to	III	70
			Central Provinces and Berar, towns	II	47
			Centre of Area —	I	5
			Centre of population	I	5
			Ceramics,—	XII	226
			Ceylon, emigrants to —	III	80
			Chemical products	XII	227
			Children to adults, proportion of —	V	108
			Children and Women working in or ganised industries	XII	242
			China, immigrants from —	III	78
			Chinese	XI	199
			Christians	IV	93
			Christian Sects	IV	99
			Cities	II	53ff
			Cities, literacy in —	VIII	147
			Civil condition by Provinces	VII	129
			Civil condition by religion	VII	128
			Civil condition the return of —	VII	124
			Classification scheme of occupation	XII	203
			Coal mines	XII	217
			Cochin	I	28
			Comparison between enumerated and deduced population	I	14
			Conditions of marriage — General	VII	125
			Cousin marriage and infirmities	X	185
B					
Balance of migration	III	66			
Baluchistan	I	16			
Baroda State	I	26			
Bengal	I	17			
Bengal emigrants from and immigrants to —	III	68			
Bengal, urbanization	II	44			
Bhadralok of Bengal	XI	190			
Bihar and Orissa	I	18			
Bihar and Orissa, emigration from — and immigration to	III	73			
Bihar and Orissa towns	II	45			
Birth sex proportions at	VI	118			
Birthplace main statistics of	III	62			
Blindness	X	178ff			
Blindness by age and sex	X	179			
Blindness by caste	X	180			
Blindness — distribution and variation	X	178			
Bombay, emigrants from and immigrants to	III	69			
Bombay, city and cities of —	II	43, 65, 66			
			D		
			Deaf mutism	X	175ff
			Deaf mutism by age and sex	X	176
			Deaf mutism by caste	X	177

Subject	Chapter	Para.	Subject	Chapter	Para.
I					
Deforestation, distribution and variation —	X	175	Immigration to Assam	III	67
Death, sex ratio at	VJ	150	Immigration to Bihar and Orissa	III	73
Decade, economic conditions of the	I	9	Immigration to Bengal	III	68
Definition of House	I	36	Immigration to Central Provinces	III	70
Definition of Town	II	41	Immigration to Madras	III	73
Defol, city of — area, density and population of —	II	53	Immigration to United Provinces	III	74
Dependants, widows and —	XII	206	Immigrant population in Burma	III	73
Depressed classes	XI	193	Immigrants to Bombay	III	69
Distribution, general, of population by occupation	XII	207	Immigrants to India from other Asiatic countries	III	78
Distribution of the population —	I	5	Immigrants from outside Asia	III	79
Distribution, general religious —	IV	84	Indian-born and foreign-born	XI	187
Distribution of rural population	II	60	Indians in Burma	XI	190
Distribution, variation in the age —	V	104, 105	Indian States, migration between British Territory and —	III	76
Drivens of Indian-born	XI	198	Indo-Burmans	XI	189
Dravidian linguistic family	IX	167	Indo-European linguistic family	IX	158
Dress, industries of —	XII	229	Industrial Oceania	XII	204
E					
Early marriage	VII	131, 132	Industries	XII	218, 221
Economic conditions of the decade	I	9	Infant Mortality	V	100
Education, comparison with the returns of Education Department	VIII	189	Infanticide, women marriage and —	X	166
Emigration from Bihar and Orissa	III	73	Infanticide, female	App.	VJ
Emigration from Central Provinces	III	70	Infanticide, variation since 1881	V	100
Emigration from India to other countries	III	80	Influence of the past on the age-revenue	V	106
Emigration from Madras	III	73	Influence of migration upon sex proportions	VI	117
Emigration from United Provinces	III	74	Incidence of Mortality and Migration upon age-revenue	V	106
Emigrants from Bengal	III	68	Indian epidemic of 1918-1919	I	31
Emigrants from Bombay	III	69	Insanity	X	170, 173
Employed, proportion of different classes of —	XII	223	Insanity by caste	X	173
Epidemic of 1918-19, Influenza —	I	11	Insanity—distribution and variation of	X	171
F					
Farm, stock, raising of —	XII	218	Insanity by sex and age	X	172
Female Infanticide	App.	VI	J		
Females, literary among —	VIII	183	Jains	IV	69
Fertility of Marriage life, the size and sex composition of the average family and the —	App.	VII	Jains, the Twenty-third sect of Western India —	App.	IV
Food industries, population occupied by —	XII	223	Jamaica	II	45, 73
Forestry	XII	214	Jute industry	XII	223
G					
Growth of special products	XII	213	K		
Growth of population	I	36	Karna and Kisa linguistic families	IX	158
Grain, towns	II	47	Kashmir State	I	31
Grain, State	I	39	L		
H					
Hindus, workers in	XII	223	Labour	XII	240
Hindi (language), Urdu and Hindustani	IX	160	Labour agricultural	XII	213
Hindus	IV	86	Labour character of	XII	245
Hindus, meaning and scope of the term —	IV	82, 86	Labour statistics of	XII	244
Hindus, religious sects of —	IV	85	Lahnda language	IX	162
Hindustani (language), Hindi, Urdu and	IX	160	Languages, displacement of minor	IX	164
House definition of	I	36	Languages, figure of the principal —	IX	166
Household, variation in size of	I	37	Languages, the standardization of in India	IX	165
Houses and families	I	36, 37	Legislation affecting marriage	VII	123
Hyderabad, towns	II	49	Leprosy	X	181, 183
Hyderabad State	I	30	Leprosy by age and sex	X	183
			Leprosy by caste	X	184
			Leprosy distribution and variation of	X	183
			Leprosy notification and retention of	VIII	148
			Leprosy among females	VIII	143
			Leprosy by caste	VIII	146
			Leprosy in cities	VIII	147
			Leprosy in English	VIII	148
			Leprosy extent of	VIII	141

Subject	Chapter	Para	Subject	Chapter	Para
Literacy, progress of	VIII	142	Pawindahs	III	77
Literacy by religion	VIII	144	Political Divisions	I	2
Literates, comparison with age groups of previous census	VIII	149	Population, comparison between enumerated and deduced—	I	14
Literates comparison with the returns of Education Department	VIII	150	Population, area and—of the whole of Empire	I	4
Living standard of	I	39	Population, distribution of the Rural	II	60
Longevity, marriage and—	VII	136	Population, general distribution of urban — in Provinces and States	II	42
Lunatic asylums	X	174	Population, pressure of—on space	II	59
M			Population, progress of—in the inter censal period	I	13
Madras	I	22	Population, movement of the—	I	6
Madras city of	II	57	Population, growth of—	I	38
Madras emigration from—and immi gration to	III	75	Population and religion, urban	II	51
Madras, towns	II	48	Polygamy	VII	125
Main statistics of Birthplace	III	62	Power	XII	241
Main Statistics of Civil condition	VII	127	Present day tendencies in the religious sphere	App II	III 50
Main statistics of sex	VI	116	Pressure of population on space	II	50
Men and Karen Linguistic families	IX	158	Progress of population in the inter censal period	I	13
Marriage, cousin—and infirmities	X	185	Proportions in urban areas, sex	II	52
Marriage, early	VII	131, 132	Proportion of children to adults	V	108
Marriage, general conditions of	VII	125	Proportion of different classes of employed	XII	238
Marriage, legislation affecting	VII	133	Proportions at birth, sex	VI	118
Marriage, and longevity	VII	130	Provinces, civil condition by	VII	129
Marriage, restrictions on	VII	126	Provincial Reports dealing with special subjects, some articles and paragraphs in	App XII	VIII 234
Marriage, the early age of	VII	127	Public administration and liberal arts	App I	I 10
Marriage, the universality of	VII	127	Public, attitude of the—and influence of the non co-operation	I	24
Marriages, the proportion of effective—and the average age of mothers	VII	137	Public Health	II	46
Mathematical aspect of migration	App V	111	Punjab	III	71
Mean age	XII	225	Punjab, cities of		
Metals, workers in	I	7	Punjab, regional movements in—		
Migration	III	66	R		
Migration, balance of—	III	76	Race in Burma	XI	199
Migration between British Territory & Indian States	III	76	Race, occupation by—and community	XII	247
Migration, influence on sex proportions	VI	117	Race, sex by	VI	122
Migration, mathematical aspect of—	App II	II	Rajputana (<i>Agency</i>)	I	33
Migration, types of	III	63	Rajputana, towns	II	47
Migration within India	III	76	Regions, sex proportions at different	VI	121
Mines, coal and other	XII	217, 218	Regional movements in the Punjab	III	71
Minerals, exploitation of	XII	216	Religion, age distribution by	V	110
Mortality, infant	V	109	Religion as a basis of statistical classification	IV	83
Movements, casual and short distance	III	64, 65	Religion, civil condition by	VII	128
Movement of the population	I	6	Religion, literacy by	VIII	144
Muhammadans	IV, XI	92, 198	Religion, sex by	VI	122
Muhammadans, religious sects of	IV	95	Religion, urban population and	II	51
Mysore towns	II	49	Religious distribution, general	IV	84
Mysore State	I	32	Religious movements in the tribes	IV	87
N			Religious sects of Hindus and Muhammadans	IV	95
Natural Divisions	I	3	Religious sphere, present day tendencies in the	App IV	III 85
Nepal immigrants from	III	78	Religions Tribal, meaning of the term	VII	135
Nomadism, North West Frontier	III	77	Re marriage of widows	I	1
Non-Co-operation influence of the—and the attitude of the Public	App I	I	Report, scope of the	VII	126
North West Frontier Province	I	23	Restrictions on marriage	VII	124ff
O			Return of civil condition	II	60ff
Occupation by race and community	XII	247	Rural areas	II	60
Occupation, classification scheme of	XII	203	Rural population, distribution of		
Occupations, general distribution of population by	XII	207	S		
Occupations, method of the census by—	XII	202	Scope of the Report	I	1
Occupations, miscellaneous —	XII	235	Scope of the return of caste	XI	191 192
Occupations of women	XII	246	Scope of the return of Literacy	VIII	139
Occupations, subsidiary—	XII	205	Sex, Blindness by	X	179
Oriya language	IX	161	Sex constitution and size of the average family and fertility of marriage life	App VII	
Ownership, nature of	XII	237			
P					
Paragraphs and articles in the Provincial Reports dealing with special subjects	App IV	VIII 94			
Parsi					

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